



IEEE Student Conference 2002

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News and Updates

Latest info

David: 04/11/02 Update

Here's something that everyone who participated in the hardware competition might enjoy ([this will take you to another site](#)).

David: 04/11/02 Update

Some final notes...

I would like to thank everyone for attending the conference. We had a great turn out this year, and some really good competitions.

Also, I plan on posting the final results for each competition and the code for the software this weekend. Thanks again for making this such a great conference.

David: 04/04/02 Update

Final call for competition pre-registration. The pre-registration page will be disabled at 5:00 pm today. After this time, all registrations will be taken at the Embassy Suites on Friday and early Saturday morning.

David: 04/03/02 Update

Last minute updates:

1. We look forward to seeing everyone on Friday.
2. Please sign in at the student competition registration desk so that we know you are here.
3. The hardware practice table schedule is as follows:
Friday - open 8am, 10am-10pm there will be a sign up sheet which allows each team 4 - 15 minute time slots; after 10pm the practice tables are first come first serve (please be courteous to all).
4. The competition table will be open from 8pm - 2am, each team will be allowed 1 - 15 minute time slot on the table.
5. There will be qualified judges on-site Friday, avoid problems on Saturday and get your questions answered early.

David: 03/18/02 Update

One more update for today.... if you have registered for a competition and have not received a confirmation email from me please let me know. I have sent out confirmations to everyone whom has registered for any of the competitions.

David: 03/18/02 Update

The conference is approaching fast (only 18 days away) so I have a few updates.

1. **Reminder: The website competition registration deadline is this Friday, March 22 at 5:00 pm.** Please be sure to register, judging will begin on Monday.
2. When you arrive at the conference please check in at both the conference registration table and the competition registration table so that we know your team has arrived.
3. There have been several questions regarding competition schedules the schedule will be as shown below. (Room

numbers will be available upon registration.) All competition registration should be complete by 8am Saturday morning.

Hardware Competition:

Friday, April 5th

- Practice Tables Open all day (beginning 10am)
- Competition Table open for practice (late evening after reception is complete)

Saturday, April 6th

- Competition Begins (8am) - Should be complete by 6 pm.

Software Competition

Friday, April 5th

- Competition Introduction Meeting (8pm) Salon D
- Directions to site, bus schedule and project details will be announced at this meeting

Saturday, April 6th

- Competition Begins (8am) - Should end by 6pm

T-Shirt Competition

Saturday, April 6th

- Setup early morning, ballots will be collected all day.

David: 02/22/02 Update

More information has been posted on the website competition. Please note that the deadline date for website submission is March 22, by 5:00 pm. This date was set so that the judges have ample time to view your site.

David: 02/18/02 Update

Ok... there have been several questions regarding conference costs and payments. Please visit the [general conference website](#) for this information.

James: 02/05/02 Update

Have you ever second-guessed yourself, only to find out that you were right after all? The table dimensions are correct. I've put the old table diagram back into place and ignore my previous correction on 1/29...The tape **is** in the right spot because the incline of the table allows the camera to see more width than the aspect aspect ratio would suggest.

James: 01/29/02 Update

The FAQ has been updated, ~~and there is an error in the table dimensions. The viewing area is a 4/3 aspect ratio, but the diagram shows a 64/45 aspect ratio. Rule 2.2.1 should read "furthest edge from the center of the table is 10in". The table diagram has been updated to reflect this correction.~~

David: 01/23/02 Update

IMPORTANT:For those of you who plan on flying to the conference. In light of the tightened airport security, you may find it helpful to call the airlines in advance if you plan on carrying your robot onto the plane or packing it with your luggage. This may help you avoid unwanted airport security issues.

Also just a reminder that the conference is fast approaching. Remember that the conference begins on Friday, April 5th. On Friday registration will begin and the hardware practice tables will be open all day. Please check back frequently as we continue to update the information on the hardware FAQ's and information on the other competitions.

David: 12/06/01 Update

The online registration page is complete. It can be found [here](#). Just a reminder that this is the competition registration form and not the conference registration form. Details about conference registration will be provided in the near future.

David: 12/06/01 Update

I have been corrected again. The correct viewing area of the camera is 5' x 3'9". There will be a small area in front of the tape line that defines the robot area that the camera will be unable to view. I'm sorry for all the confusion.

David: 12/03/01 Update

OK... I have a few updates to make. First, the PDF registration form will only work with a paid version of Adobe, the free version from the web will not work. Sorry.. I know we all like the free stuff. Until I get the ASP registration page posted.. you may download the PDF and copy the form into Word to submit.

Next, someone has found a math error on the hardware rules. Under the camera tower section it states that the camera should view 5' x 3'9"... this is incorrect. The camera should view the entire play area of 64" x 3'9". I appologize for the mistake.

Finally, there have been several questions regarding the fundamental rule. I think that by carefully reading the FAQs and understanding of this rule can be achieved.

David: 11/30/01 Update

I have finally updated the software competition page with some preliminary information. More information to come soon.

David: 11/13/01 Update

We have prepared a PDF form for competition registration. To register for the competitions: [download](#) the PDF, fill it out and email to secon2002hardware@engr.sc.edu. Please use the subject of: Registration. Also an online version of this form is still being created and will be posted prior to winter break.

David: 10/21/01 Update

After a long delay from answering the many questions that all of you have been sending over the past few weeks, the FAQ's have been updated. I would advise everyone to look through these, they answer a lot of good questions and provide some clarifications on the rules.

I am currently working on coding some online competition team registration forms... I will post these as soon as they are completed.

David: 10/04/01 Update

Just a reminder that our committee is working very hard on getting the available information to the website in a timely manner, so keep checking back for more updates. Today, I have posted the finalized rules for the student paper competition. We hope to have the competition registration information ready soon, and the FAQ's for the hardware competition updated sometime next week.

David: 09/25/01 Update

As per the many email requests have received, the preliminary T-Shirt competition information has been posted. The registration details should be posted in early November and locations for the competition and on-site (late) registration will be posted as soon as I know where they will be.

David: 09/24/01 Update

Note: Rule 2.3.5 has been modified for clarification purposes.

The amplifier issue has been resolved. If you have already purchased the Radio Shack amplifier you do not need to purchase the new part. The Radio Shack amplifier is the **exact** same part as the replacement. The replacement part is: [AntennaCraft part No. 10G203](#), purchasing details can be found on their [website](#). I hope this has not caused too many delays in your development schedule.

Things to expect in the near future: Info on paper competition, info on website competition (early Nov.), info on T-Shirt competition.

James: 09/16/01 Update

Ladies & Gentlemen, I must apologize for the untimely update of this site. We had the rules finalized by Friday, but my computer decided it was overworked and underpaid, so it quit. Although I keep frequent backups, it took a few hours yesterday to bring it back, at which point I had to make all of the updates...*again*. Hopefully, this late update did not disrupt your plans much. (*Besides*, you should be out enjoying yourself on a Sat. night - See a movie, get some ice cream, coffee, go out with friends, whatever.)

The hardware competition rules are finalized. Clarifications will be posted but the current wording of the rules will not change. We are making efforts to provide information on the other competitions sometime in November.

Also of note is that the base for the table is no longer optional. Since we are allowing teams to have robots that extend outside of the playing arena, we must be certain that a uniform height for the competition table exists.

For those of you who haven't noticed, the ball has been changed from the foosball to a practice golf ball. This change was made due to the problems we've heard concerning Quality Table Games. There are a few changes in the rules, so be sure to read up.

We have recently been told that Radio Shack has discontinued the distributor amplifier that we've specified in the rules for the hardware competition. If you can still find it, go ahead and use it, if not, we'll have a suitable replacement posted shortly.

I will be updating the FAQs and the Camera tower information tomorrow, so be sure to check back.

James: 07/18/01 Update

We've resolved the lens issues with the camera. If you haven't purchased your camera yet, the change of lens doesn't affect your purchase. (The correct lens is now in the package.) If you have already purchased your camera and have not been contacted by J.C. at Global Technologies, please give him a call to arrange an exchange of lenses. Because of the new focal length of the lens, the camera will need to be about 80" above the table. We'll put together new camera tower instructions sometime soon. In the meantime, be creative...you should see how we have it mounted to the rafters. I've put up a PDF version of the rules for easier printing, reading, etc.

James: 06/30/01 Update

We have some issues with the choice of lens for the camera. If you haven't already purchased the camera, please wait until these issues are resolved (which will be *very* soon).

James: 06/26/01 Update

The rules have been revised for some wording issues and are now updated. The instructions for the new table arena are up so you may start building it. (The new arena is so simple, you'll be done building before you know it). We haven't hammered out any new design for a camera tower, and the curtains may be removed from the new table, so don't proceed with those yet. That's it for now. Coming soon: animated assembly video.

James: 06/14/01 Update

The newest revision of the rules is up. Not including revisions of wording, I hope this is the last major change. We're working on putting together the new building instructions. I'm sure you'll be happy with them. We built the new table in about 1.5 hours from scratch and we didn't even know what it was going to look like. Simplicity, Simplicity, Simplicity.

James: 05/31/01 Update

STOP!!!

Apparently, I was wrong about the green-light on building the table. It seems we're going to be going back to the old-style version of the competition (i.e. more like pong). The benefit of this is that the rules and the table become **much, much simpler**. If you have begun work on the table, please e-mail us to let us know, but we'll be changing the table design some (e.g. lowering the angle :). We're going to return this competition to simplicity and hopefully make it easier on all of you in the end. Stay tuned, we'll update as quickly as we can to shift to the old version of the competition. If you have any question / concerns, please e-mail us.

James: 05/22/01 Update

The latest of just about everything is now posted. I've listed the things that have yet to be posted, and if anything appears missing (e.g. listed as "will be posted") and is not listed above please send an e-mail. The rules are fairly finalized. Once everything gets up, we'll specify a "lock-out date" on which the rules will be considered final. The building instructions are now updated and posted. I have to add some images and add-ons to some of those instructions, but unless I'm incorrect, you can start building away!

James: 05/06/01 Update

I bet you're wondering where the latest revision to the rules are...so are we. No, really. We're currently swamped with exams and have some major issues that need to be addressed before we can post the next rules revision, but expect that the next revision will be made available as soon as we can.

James: 04/19/01 Update

The current revision of the rules are now available, along with a new link for some of the frequently asked questions. We will not have the rules available in PDF format until the rules have reached a "steady state" :). As for table building instructions, we're still making modifications to them, so don't rush out and go carpenter on us just yet. The base of the table is optional, 4 concrete blocks may work just as well, as long as you can keep the table level and don't have to get the blocks from under a car.

James: 04/13/01 Update

We've decided to keep everyone up to date by posting what we're working on here. Since I'm handling the Webmastering, I'll try and keep these pages as current as possible.

I'm currently trying to make a good, clear diagram of the robot size limitations so that what I'm about to explain is clearer. We've decided to extend the paddle width limitation and try to clarify where those limitations occur. A robot is limited to 8" in width from the top of the table to 5cm off of the table. Above 5 cm above the table, there are **NO** width restrictions (as long as it follows the other rules - **disqualification bad**). Depth (distance from the front of the robot to the back) remains 10", but that limitation is due to the construction of the table. You are allowed to have just under 12" in depth above the 5 cm from the table. Basically, the *footprint* (area under 5cm) of the robot cannot be larger than 8" by 10", but there are no width and height restrictions beyond that and the allowable depth goes up to 12" above the footprint (until the height exceeds the walls, then depth is also unlimited).

Wouldn't that diagram come in handy now? I'll make it available as soon as it's ready.

Amiel: 04/13/01 Update

Hey guys. I was one of the people who presented to you about the competition at southeast con. Since I am a graduating senior, you probably won't hear much more from me except for the next couple of weeks as we update the rules and FAQs and what not.

I am working on these issues:

1. The buffer design for isolation of the circuits (May 1st)
2. The competition bracket system - since there will be multiple levels of competition (April 19th)
3. camera selection and specifications with Dave (April 20th)
4. anything else that comes up

Trish: 04/13/01 Update

Hey, right now I am working on getting the updated version of the rules out. The new updated version of the rules should be posted on the this website under Hardware Competition Rules by Thursday, April 19th. I hope to have alot of the conflicts with the rules worked out by then, but I know that more may arise. If you have any questions or concerns, please feel free to email me at secon2002hardware@engr.sc.edu. This email account should be up and running soon.

David: 04/13/01 Update

Currently I am resolving many of the issues regarding the table. The size of the bins have been set and we have added them to our table. The information for constructing these will be added to the playing area instructions during our next update on Thursday of next week. Also, I am in the process of creating a 3D AutoCAD drawing of the table; my current plan is to have this finished before May 1st.

I am also helping Amiel in the process of finding a camera with ample availability, we plan on having this issue resolved by the end of next week.

Finally, I am compiling and finding answers / solutions to all the FAQ's. I hope to get most of these answered during this weekend and start posting them beginning next week. It seems that everyone is as excited with this competition as we are, so keep sending in those questions so we can make this the best hardware competition that the Southeastern Conference has seen.



This page updated undefined.

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URL: <http://www.ee.sc.edu/orgs/Secon2002/>.



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Instructions

[- Table Base](#)
[- Playing Arena](#)
[- Camera Tower](#)

FAQ

[Registration](#)

Congratulations to this year's competitors!!

The official results of the competition are as follows: ([Bracket.jpg](#))

- 1st Place – University of Florida**
- 2nd Place – Tennessee Technological University**
- 3rd Place – Clemson University**
- 4th Place – Georgia Institute of Technology**
5. University of Tennessee at Martin
6. Mississippi State University
7. University of South Florida
8. Mercer University
9. University of Tennessee
10. University of Alabama at Huntsville
11. University of South Alabama
12. Western Kentucky University
13. University of Southern Indiana
14. University of Kentucky
15. Chattahoochee Tech
16. University of North Florida
17. Tennessee State University
18. Jamaica
19. University of Evansville
20. University of Louisville
21. Florida International University
22. Virginia Military Institute
23. University of Mississippi
24. Guilford Tech
25. Southern Polytechnic University
26. University of West Florida
27. The Citadel

[Download](#) as Acrobat PDF

1. Introduction

In Spring 2002, the Midlands Chapter of IEEE will host the IEEE Southeastern Conference (SECon) in Columbia, South Carolina. The University of South Carolina and South Carolina State University will host the student segment of the conference. This document contains information pertaining to the Hardware Design Competition of the IEEE Region 3 Student Conference. The theme for the 2002 Southeastern Conference is:

"Learning from the Past - Innovating for the Future"

We recognize that concepts and inventions from the past inspire many of today's designs and accomplishments. Playing on that theme, the student hardware contest is derived from one of the earliest electronic games - PONG.

Pong was one of the first video games created by the Computing Generation. "Pong" was created in the late 1950's and has since been adapted and modified many times. The console version of Pong, introduced in 1972, is probably the best remembered. The electronic Pong game is itself based on Ping Pong; the goal of the two competitors is to always return an incoming ball. In the original game, a point is scored whenever the ball goes

past the opposing player.

In the hardware competition for the 2002 Student Conference, a modified Pong game will be played by robots facing off across a rectangular playing field. This contest will exercise a wide variety of engineering skills, from circuits, to machinery, from electronics to power systems, and from microprocessors to dynamics of systems.

Contestants will be provided with an individually-buffered signal from a video camera that views the field of the playing arena. From that signal, robots can determine the ball position and trajectory and use that information to position the paddle and return the ball. The playing surface slopes from the center towards each side so that the ball will not stop in the middle of the table.

This is the final copy of the rules. Any errata, clarifications, or changes will be available at: <http://www.ee.sc.edu/orgs/Secon2002/>.

Description of the contest

The competition will consist of two robots, at either end of a 4' x 8' long table, volleying a ball back and forth until one of them misses. The table design places bounds on the minimum and maximum speeds at which a competitor can propel a ball across the court to score points. Competitors accrue points whenever a ball ends up in the scoring bin on the opposite end of the table. Note that the game table is deliberately designed so that a ball will bypass the scoring bin if it is returned at too fast a speed.

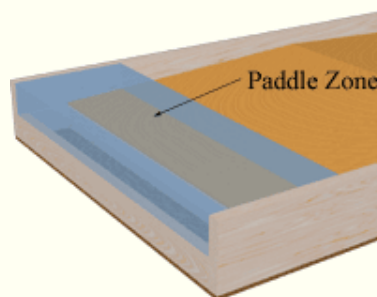
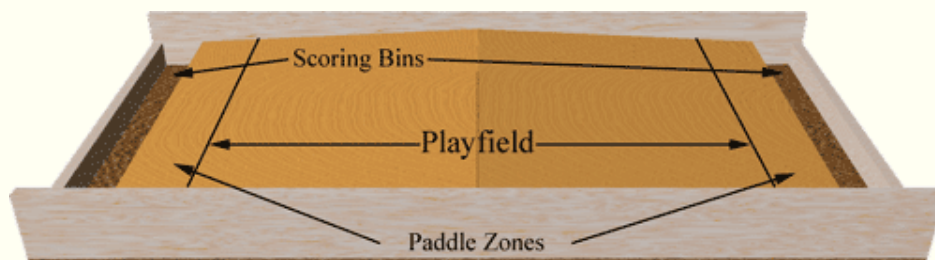
2. Rules

1. Fundamental Rule

The game is intended to be played in a way consistent with play in the original electronic Pong game; any form of play that changes the basic nature of the game will not be in compliance with this fundamental rule and the infringing robot will be disqualified.

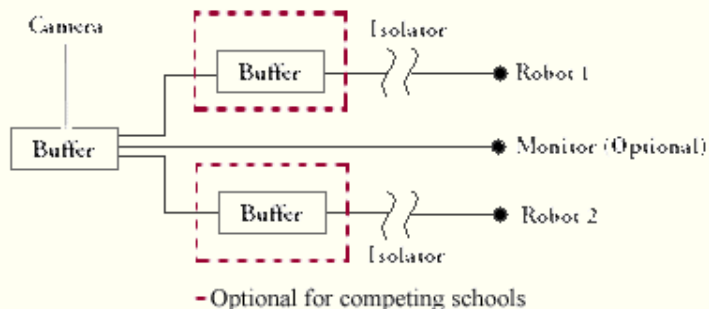
2. Competition Arena and Equipment

1. The playing arena is divided into 5 zones: the playfield zone, two paddle zones, and two scoring bins. A paddle zone is defined as the area below the top of the longitudinal court rails and not within the playfield zone. A 2" wide strip of red duct tape whose furthest edge is 10" from the edge of the scoring bin will mark the beginning of the paddle zone. (*see diagrams below and [here](#)*)



2. A single video camera will view the playfield from above and center. The standard **NTSC** video signal from this camera will be routed through a Radio Shack three-output AV Distribution Amplifier ([Cat. #15-1103](#)). One output will be routed to a video display device and the other outputs will be routed one to each contestant through two additional distribution amplifiers* and

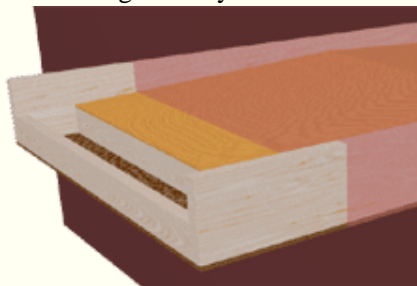
through separate 75-ohm output impedance buffers ([Jensen Transformers VB-1BB](#)). * - Optional for competing schools, but will be in place for final competition to guarantee isolation. (see diagram below):



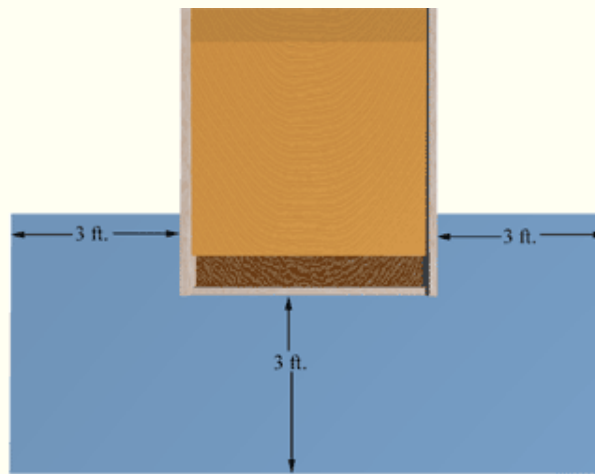
3. Contestants must be aware of and take into account the possibility of small imperfections in the table and variation of ambient lighting conditions (i.e. slight shadowing, etc.). These effects will be minimized as much as reasonably possible during play.
4. The ball will be a plastic practice golf ball (looks like a wiffle ball). These can be found almost anywhere (e.g. Wal-Mart, K-Mart, Target)
5. A power outlet strip will be provided at each end of the table for competitors' use.

2. Robot Specifications

1. A robot is any physical system that a competitor places on or near the competition table for the purpose of engaging in the contest..
2. During play, if a robot intercepts a ball, it must immediately return the ball either by:
 - a. Striking the ball, or
 - b. Capturing and immediately ejecting the ball
3. Delaying play by holding the ball is not allowed.
4. A robot must operate autonomously throughout the course of the match. Once the match starts, no further contact with the robot is allowed until the end of the match.
5. Any portion of a robot that exists within the paddle zone and within 5cm of the surface of the table can measure no more than 8" between extreme points in the transverse direction.
6. Air tanks will be allowed as long as it is less than 100 psi., the tank is certified safe by the supplier, and the tank has a safety valve attached.
7. No portion of the robot can, at any time during play, penetrate the plane separating the playfield from the paddle zone.
8. No portion of the robot above the scoring bin may obstruct the ball's entry into it.



9. Outside of this area, robots may be of any size, but cannot at any time occupy any space above or on the playfield or extend further than 3' from the outside edge of the table (i.e. the sides and back of the table).



10. Any robot considered by the judges to be potentially dangerous (e.g. explosive) to spectators will be disqualified. In addition, no robot shall:
 1. damage the opposing robot nor hinder, in a manner dissimilar to Pong, its ability to detect the ball (i.e. spin hits are okay)
 2. emit any hazardous substances.

4. Tournament and Match Rules

1. Teams will be randomly placed into double-elimination competition brackets.
2. Prior to the coin toss, the robots will be checked for safety compliance.
3. A coin toss will decide who will serve first. The calling team will be shown on the brackets. The team who wins the coin toss has the choice of either a) receiving the first serve or b) side of the table.
4. Prior to the start of the match, competitors will be allowed 5 minutes to set up their robot. (*This is to encourage the design of a self-contained robot*)
5. Serves, which originate from chutes at the center of the table, will always alternate from side to side on a fixed schedule regardless of which team scores.
6. The match will end once one of the following occurs:
 - . A 5 minute time limit has expired.
 - a. The 10 ball serving supply has been exhausted.
 - b. A robot has been disqualified or otherwise forfeits the match.
7. At the end of the match, the robot with the most points is declared the winner.
8. In the event of a tie, refer to section 2.5.2
9. A robot has 3 attempts to return the ball across the centerline of the table, if a robot fails to do so, the ball will be removed from play and put into its bin. If the ball cannot be removed from play (e.g. stuck inside a robot) then that robot forfeits the match.
10. A robot will forfeit the match for entering or extending over the playfield (i.e. penetrating the plane separating the playfield and paddle zone)
11. During play a robot will be disqualified if it does any of the following:
 - . Causing damage to any part of the table or arena electronics
 - a. Intentionally causing damage to the opposing robot
 - b. Altering the video signal provided to the other robot
 - c. Altering the ball in any fashion
 - d. Throwing off the camera calibration (i.e. any action that requires the camera to be recalibrated)
12. Flash photography is strictly prohibited during the matches.
13. Appropriate school identifications and IEEE logos are permitted on the devices, but sponsorship identifications are prohibited.
14. The Judges shall enforce the spirit of the rules in addition to specific rules.

15. Decisions of judges are final.

5. Scoring

1. Match Scoring

Robots will receive 1 point for each ball in its opponent's bin. The robot with the most points at the end of the match is the winner.

2. Tie-Breaker Scoring

0. In case of a tie at the end of a match, a two minute sudden death overtime period will be played. A coin toss will determine who receives the ball first.

1. First team to score during sudden death will be declared the winner.

2. Until a point is scored in sudden death, an additional ball will be added to the table every two minutes from the beginning of the sudden death round.

3. Table Description and Construction Information

The table is broken up into three major segments: the base, the playing arena and the camera tower. The list of materials and necessary steps for building each segment will be in the following sections of this document. All of the parts that are needed to construct the base, playing arena and the camera tower can be purchased from your local hardware/electronics store (Lowe's, Home Depot, Radio Shack, etc.).



Figure 1 – Top and Side Profile of Table

1. Base

A base will be constructed to raise the playing surface off the floor. The base will consist of six legs and will support the weight of the playing field. Instructions on how to build the base can be found [here](#).

2. Playing Arena

The playing arena is 8' x 4'. It consists of two robot areas on an angled playing field and two scoring bins. The playing field has a slope of roughly 2.5 degrees. Instructions on how to build the playing arena can be found [here](#).

3. Camera Tower

The camera tower will be mounted above the center of the playing arena so that the digital camera can be held motionless to obtain data. The camera will rest approximately 80" above the center of the table. It will be adjusted to view just the playing field, which is 5' x 3'9". Each robot will be given a direct video feed from the camera. More information on the camera tower is available on the [Camera Tower page](#)

4. Camera and Adjustments

The camera used in the competition is the [Everfocus ET100AE](#) ordered from [Global Technologies](#). The camera specifications are shown on their website. This camera is offered at a discounted price to schools participating in the hardware competition. To obtain the discounted price follow [these instructions](#).

For the competition, the camera needs to be aligned and focused so different tables have standardized outputs for the robots. Instructions for adjusting and focusing can be found with the tower instructions.

3. Contact Information

Roger Dougal – Hardware Competition Development Advisor

Enrico Santi – University of South Carolina Student Branch Advisor

Patricia Davis – SoutheastCon 2002 Student Co-Chair – padavis0@engr.sc.edu

David Brearley – SoutheastCon 2002 Student Co-Chair – djbearl@engr.sc.edu

James Southard – Student Conference Webmaster

Questions? – secon2002hardware@engr.sc.edu

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Post Conference Competition Information

Congratulations to our Winners!!

1st Place: University of Kentucky

2nd Place: University of Evansville

3rd Place: Georgia Institute of Technology

As we had promised below is the source code for each team's DLL as well as the log files from the tournament and the game exe/source. A word to the wise: we have only tested this program on Windows 2K, we are unsure how it will react in other windows environments.

A copy of the rules can be found [here](#).

Note: All source code links are .zip files.

Our version of GO

- [Source Code](#)
- [Executable](#)

DLL Players

- University of Kentucky
 1. [GoConAI.dll](#)
 2. [Source](#)
- University of Evansville
 1. [GoConAI.dll](#)
 2. [Source](#)
- Georgia Institute of Technology
 1. [GoConAI.dll](#)
 2. [Source](#)
- University of the West Indies
 1. [GoConAI.dll](#)
 2. [Source](#)
- Florida International University
 1. [GoConAI.dll](#)
 2. [Source](#)
- Western Kentucky University
 1. [GoConAI.dll](#)
 2. [Source](#)
- University of Alabama at Birmingham
 1. [GoConAI.dll](#)
 2. [Source](#)
- University of Technology
 1. [GoConAI.dll](#)
 2. [Source](#)
- Christian Brothers University
 1. [GoConAI.dll](#)
 2. [Source](#)

- **Tennessee Technological University**
 1. [GoConAI.dll](#)
 2. [Source](#)
- **Mississippi State University**
 1. [GoConAI.dll](#)
 2. [Source](#)

Logging stuff:

Below are the log files from the games that occurred. To run a logged game: open the file to see if it is the black player's log file or white player's log file. This can be seen by the columns of B's or W's. If it is the black player's log, rename it to BlackLogFile.log otherwise name it WhiteLogFile.log. Copy an instance of this [dll](#) into two separate folders, with executables in each. Also copy the white log file into one of these folders and the black into the other. Run the program from these folders and simply play an AI vs. AI game. When run... it should be run such that white challenges black.

Matches are shown as white vs black.

Bracket 1:

Round 1:

[Evansville](#) vs [CBU](#)
[FIU](#) vs [UWI](#)
[GaTech](#) vs [UTech](#)
[MSU](#) vs [UAB](#)
[TTU](#) vs [WK](#)

Round 2:

[MSU](#) vs [Evansville](#)
[FIU](#) vs [GaTech](#)
[UK](#) vs [TTU](#)

Round 3:

[UK](#) vs [GaTech](#)

Round 4:

[UK](#) vs [Evansville](#)

Bracket 2:

Round A:

[CBU](#) vs [UAB](#)
[WK](#) vs [UTech](#)

Round B:

[UWI](#) vs [FIU](#)
[MSU](#) vs [WK](#)
[TTU](#) vs [UAB](#)

Round C:

[Evansville](#) vs [FIU](#)
[GaTech](#) vs [TTU](#)

Round D:

[GaTech](#) vs [MSU](#)

Round E:

[Evansville](#) vs [GaTech](#)

Final Match:

Evansville vs University of Kentucky

Preliminary Software Competition Information

This information is accurate as of 2/12/02. Any further updates will be posted here.

When and Where:

The software competition will be held at the Swearingen Engineering Center. The competition will be held during the day on Saturday, April 6th. A short information session will be held on the evening of Friday, April 5th at 8:00 pm in Ball Room D. The details of the project, bus schedule to Swearingen Engineering Center, directions and other important information will be distributed at this time. It will be to your advantage to be there.

Registration

Each school will be allowed to register a single competition team. Teams can be no larger than 4 members. Team members **must** be undergraduate students. To register, submit the PDF form found [here](#) or go to the online [registration form](#). Each team will need to designate a *team leader*.

We reserve the right to decline team registration due to lack of facilities. We do not believe this will be a problem, however, registering early will reserve your slot. Late registrations will be accepted on a first come, first serve basis until all slots have been filled.

What will be provided?

- Computer with Microsoft Windows 2000
- Microsoft Visual C++ compiler
- Documentation, sample code, hints, suggestions, etc.

What will not be allowed

- Internet Access - This is a competition.
- Any data medium. This includes but is not limited to: CDs, Zip Disks, floppy disks.

Project Content

The competition will follow the traditional short term competition format, therefore the exact details of the project will be disclosed until the competition begins. However, we can provide the following information to help the teams be prepared.

This year's competition will be using a C++ platform. In general, the competition will focus on array processing and artificial intelligence. More detailed information will be provided at a later date.

Also please remember to bring what ever reference books you feel may be necessary.



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The annual Student Paper competition is held at SoutheastCon. Each student branch in Region 3 is invited to submit its best single entry. The guidelines for this competition are discussed below.

1. Timetable

March 1: The entrants must e-mail a PDF version of their papers to the Regional Student Activities Chair (RSAC), Dr. Bruce Walcott b.walcott@ieee.org, no later than this date. Please use the subject, IEEE R3 Paper Contest Entry in the header of the e-mail and give complete contact information for both the student and the student branch counselor.

March 15: Judging of written papers is to be completed by this date. Contestants whose papers are selected to be presented orally will be notified immediately thereafter by the host Counselor or the Regional Student Activities Chair acting for the host Counselor. In order to ensure prompt notification, please include the branch counselor's telephone number in the letter of transmittal.

Conference Time: Finalists selected must be at SoutheastCon to present their papers.

2. Eligibility

To be eligible to enter a paper in the competition, the author must be a paid-up student member of IEEE in Region 3 at the time that the entry is submitted. The student must also be an undergraduate the Spring term of the year the paper is presented. Multiple authors are permitted up to a limit of three, all of whom must be undergraduate students and IEEE student members.

Any questions regarding eligibility or deviation from prescribed procedures will be decided upon by the members of the judging team present at the competition.

3. Prizes

The Institute Life Member Fund provides funds to the Region for prizes as follows:

- First Place - \$850.00
- Second Place - \$500.00
- Third Place - \$250.00

In addition to the first, second, and third place prizes, the school represented by the Author of the first place paper will receive a plaque.

4. Written Presentation

The following is a list of the major parts of a suitable paper. It is intended only as a basic guide in establishing the format.

1. Cover page (use the format described in [Section 10](#)). The cover page, which contains the author(s) name(s) and the Student Branch affiliation, will be removed before the paper is transmitted to the judges.
2. Title page (names of persons or schools should not appear on this page - see [Section 11](#)).

3. Abstract (not more than one page)
4. Introduction
5. Body of paper
6. Conclusions and Recommendations
7. Appendices
8. References/Bibliography

The paper should be typewritten, double-spaced, no smaller than 10 point font on one side of 8-1/2" x 11" paper. Legible photocopies are acceptable. The pages of the paper must be numbered consecutively. The Introduction, Body, Conclusions, Tables, and Diagrams together may not exceed 15 pages while these sections together with the Appendices may not exceed 20 pages. Judges will penalize those who exceed this length. Each copy of the paper submitted for judging must be securely fastened in a suitable folder.

Contestants are strongly encouraged to bring additional copies for distribution at the time of the oral presentation. These additional copies need not be in folders.

5. Oral Presentation

The 10 to 12 highest scoring papers in the written judging will be selected by the RSAC for oral presentation.

Each contestant will have 15 minutes for oral presentation and 5 minutes for a question and answer period. A timekeeper will indicate, by some suitable method, how a contestant's time is progressing and when each of his/her prescribed time periods is completed.

The RSAC will use a random process to determine the order of oral presentation and will endeavor to inform the participating schools of their presentation order prior to the conference.

6. Judges

The basis for the judging is indicated in the following sections. The winners shall be determined from the sum of written and oral scores.

7. Written

There will be three judges of the written papers ([See Section 12.2](#)). They will judge each of the papers independently and send their scores to the RSAC.

8. Oral

Three judges of the oral presentations ([See Section 12.3](#)) and a timekeeper will be selected by the Host Counselor.

9. Scoring

| |
|--|
| WRITTEN PRESENTATION (maximum possible score: 56 points) |
|--|

| | |
|--|------------------|
| <p>Originality</p> <p>1. Originality should be interpreted to give credit for results, investigative procedure, and conclusions that are primarily those of the author. A general guidance from the literature is acceptable.</p> <p>2. Originality can be evidenced by an unusual, imaginative, or concise treatment of the subject. Both (1) and (2) should be present to a reasonable degree to receive full credit.</p> | 12 points |
| <p>Analytical Treatment</p> <p>The fundamental nature of the subject should be clearly revealed, and the component parts of the topic should be carefully related to yield a unified analysis.</p> | 16 points |
| <p>Interest</p> <p>The paper should be of general engineering or computer science interest and a sound engineering reason for considering the subject should be present.</p> | 12 points |
| Mode of Expression | |
| 1. Logical organization of material and clarity of presentation | 4 points |
| 2. Concise and coherent expression of thoughts | 4 points |
| 3. Effective and judicial use of electrical theory | 4 points |
| 4. Adequate introduction and closure. The introduction should properly orient the reader for the main body of the material. The closure should include a summary of the writer's contributions, forecast, or conclusions. | 4 points |
| ORAL PRESENTATION (maximum possible score: 44 points) | |
| <p>Speaking Techniques</p> <p>The contestant should be clear and easy to understand.</p> | 12 points |
| <p>Style</p> <p>Presentation of material should follow a logical course and should stimulate the thinking of the audience.</p> | 12 points |
| <p>Introduction and Conclusion</p> <p>Presentation should begin with a proper introduction. Background of the problem should be made clear before proceeding to the main body of the presentation. Conclusions should be briefly summarized.</p> | 5 points |

| | |
|--|------------------|
| Technical Presentation The speaker should exhibit a clear understanding of the topic, of the important related literature, and of the associated electrical theory. The presentation should be technically sound, and the fundamental nature of the subject should be clearly described. | 10 points |
| Discussion The speaker should display a reasonable knowledge of the subject by answering the questions adequately. | 5 points |

10. Cover Page

Name and Mailing Address of School

TITLE OF PAPER

Student's Name

Student IEEE Membership Number

Submitted for consideration in

Region 3, IEEE

Student Paper Competition

Endorsement of Branch Counselor

The author(s) of this paper are student members of this IEEE student branch and will still be undergraduate students at the time of SoutheastCon. This paper is the only entry of our student branch.

Signature: _____

Name (Typed): _____

Telephone Number of Counselor: (____) _____

11. Title Page

TITLE OF PAPER

ABSTRACT

Give the abstract . . .

Start paper . . .

[**NOTE:**Be sure that this page **DOES NOT** have the student's name or school affiliation. Also, be sure that the COVER page with names and affiliations can be removed from the paper prior to sending to the judges.]

12. General

The following general comments are part of the procedures for running the paper contest.

12.1 Host Counselor or RSAC

The RSAC is available to assist the Host Counselor in managing the paper contest. The Host Counselor and the RSAC should decide in the Fall prior to the conference who is to receive the results from the written judges and notify the selected finalists. The Host Counselor is always responsible for deciding what number of papers (10-12) are to be presented.

12.2 Judges - Written Presentation

The judges of the written presentations are usually Branch Counselors at schools that did not submit entries to the paper contest. Usually, the RSAC picks these judges and manages the written portion of the paper contest, notifying the host Branch Counselor and the participants of the results. All papers should be judged by all of the judges.

12.3 Judges - Oral Presentation

The judges of the oral presentations should be working electrical engineers from the local vicinity of the Student Conference. Usually, the host Branch Counselor picks these judges and makes arrangements for their participation. The same set of oral presentation judges should judge all presentations.

12.4 Alternate Paper Sessions

The host branch may wish to have alternate student paper sessions and publish the contest papers and the additional papers. Although participation in an alternate session is encouraged, these students will not be eligible for the monetary awards. Care should be taken not to detract from the Region 3 Paper Contest. Scheduling additional student paper presentations in parallel with the Student Paper Contest has been specifically denied by the RSAC.

12.5 Paper Presenter Responsibilities

The host Paper Contest Coordinator (and the Branch Counselor) should strongly encourage the paper presenters to arrive at the presentation location 30 minutes prior to the start of the program and to stay while all competing authors make their presentations.

12.6 Copies of Student Papers

The host branch is responsible for printing several copies of the papers presented by the students. As a minimum, each student author should receive a bound copy of all of the papers, including a Table of Contents.



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Software Design

Student Papers

Web Design

T-Shirt Design

Party

Job Fair

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Registration

Congratulations to this year's competitors!!

The official results are as follows:

- 1st Place – [University of South Florida](#)
- 2nd Place – [Florida International University](#)
- 3rd Place – [Tennessee Technological University](#)
- 4th Place – [Georgia Institute of Technology](#)
5. [Western Kentucky University](#)
6. [Mississippi State University](#)
7. [Virginia Commonwealth University](#)
8. [University of Mississippi](#)
9. [University of West Florida](#)
10. [University of Tennessee](#)
11. [Christian Brothers University](#)
12. [University of Evansville](#)

We have found highly qualified judges for this competition. Our judges have presented me with the following criteria.

First, each school shall only submit one web site. Second, **all website entries shall be submitted no later than 5:00 pm on Friday, March 22.** This will give the judges time to explore your site and give it the attention it deserves. During the judging period, March 25th thru April 7th, your website should remain static (no updates please!).

Ok, here are the official rules and judging criteria. Also keep in mind that the winning website will be submitted to the IEEE international website contest, you should design your website such that it also meets their criteria. The information for this can be found [here](#).

1. Submission

Each school may submit one web site. If the web site cannot be loaded during the time of judging, the team will be disqualified. All judging will occur between March 22nd and April 7th, as per stated above.

2. Computers

A computer on which the web pages will be viewed has not yet been designated. The computer will be a minimum of a 500 Mhz machine using the Windows 2000 operating system. Netscape Navigator 6.2 and Internet Explore 6.0 web browsers will be installed.

Scoring

Appearance 20%

The appearance category includes such features as: spelling and grammar, readability, and the aesthetics of the web site. This category will be judged on how professional the web sites appears, along with how well the page can be

viewed.

Usability 30%

Usability encompasses the areas of user friendliness and organization. Though a web site may contain useful information that is beneficial to its audience, without a well organized and user-friendly interface, this information may never be read. Therefore, this category holds a rating weight.

Content 45%

The content of the web site holds the greatest weight since the main purpose of a web page is considered to be the process of getting appropriate information across to the viewing audience. The content of the web site should be suited for the intended audience, have current information, and have appropriate links. Technical aspects of web site design will also be considered under this category.

Compatibility 5%

Netscape Navigator 6.2 and Internet Explorer 6.0 will be the available browsers for this contest. Web pages that are compatible on both browsers will receive a better rating.



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Congratulations to this years winners!!!

1st Place: University of Technology

2nd Place: University of Tennessee

3rd Place: Tennessee Technological University

The T-Shirt competition is always a more enjoyable part of the conference. The T-Shirt(s) submitted allow schools to artistically express themselves. Submitted shirts should represent either their local IEEE branch (or department) or Southeastern Conference 2002.

This year each school will be allowed to submit up to 2 shirts. Each entry shall include 2 shirts, so that the front and back can be displayed side by side. In addition, one sign must be submitted with each entry that contains the school's name. Additional information may be included on each sign that describes the T-shirt or school. Each sign must be no larger than 8.5" x 11".

Registration can be found [here](#). The current plan is to have entries submitted at the conference no later than the end of registration on Friday, April 5th. Please check back for details.

Judging will be conducted on Saturday, April 6th at a location TBD. Each conference attendee will be given a ballot upon registration to vote for their favorite shirt. The ballots will be collected at the competition registration table, until 9 pm on Saturday. The ballots will be tallied to determine the first, second and third place winners.

Questions should be directed to the Student Co-Chairs:

David Brearley - SoutheastCon 2002 Student Co-Chair - djbearl@engr.sc.edu

Patricia Davis - SoutheastCon 2002 Student Co-Chair - padavis0@engr.sc.edu



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Software Design

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Web Design

T-Shirt Design

Party

Job Fair

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The Party location has been determined. Unfortunately, we feel that you should have to attend the conference to learn the location of the party. So, here is what we can tell you:

- The party will be held Saturday night from 9pm till midnight.
- We will provide transportation for this time frame. If you choose to stay out later, your gonna need a taxi to get home.
- Also, heavy Hors D' Oeuvres and non-Alcoholoc drinks will be provided.
- We have also hired a DJ for your entertainment.

All other details will be given at registration (just ask the students at the competition registration table).



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The only information available at this time is that the job fair will be held on Friday afternoon.

More information will be posted ASAP.



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Student Competition Registration

Competition pre-registration has closed. We will see you at the conference.

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USC-IEEE Site
USC Website
SECon 2002 Site



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