



Technische Universität München

Report

IEEE EMBS Student Chapter Munich: Inaugural Event

6th June 2014

By

Amit Shah (amit.shah@tum.de)



Executive Summary

A student chapter of IEEE EMBS was inaugurated on *6th June 2014* in Munich, Germany. The event comprised of EMBS Distinguish Lecture Program (DLP), other technical talks and open discussions. Prof. Dr. May D. Wang, professor at Georgia Institute of Technology and an EMBS distinguish lecturer, delivered an exciting lecture on challenges in dealing with ‘Big Data for healthcare’. Prof. Dr. Nassir Navab, professor at Technical University Munich (TUM) and Johns Hopkins University, presented on computer aided medical procedures and robotic imaging. Further, the lecturers shared their personal experiences in the respective career paths to motivate the students to take up engineering challenges in medicine and biology. Dr. Benjamin Frisch, faculty advisor of the chapter, shared his experiences in technology transfer of radiation detectors from high energy physics into medical imaging at CERN, Geneva. His previous research on Positron Emission Mammography started a lot of interesting discussions. Amit Shah, the interim chair of the chapter, presented the EMBS activities and benefits for the students to encourage them to become EMBS members. The students from various departments of TUM and other research institutes in Munich participated in the event. The events was planned and organized successfully in short time through excellent team work and support from TUM GSISH. The event was sponsored by EMBS, GSISH and IMETUM.

Background

Munich is the 3rd largest city in Germany and hosts 2 well known universities – Technical University Munich and Ludwig Maximilian University. There are also a number of research institutes such as Helmholtz Association of German Research Centres, Max Planck Institutes and German Space Research Organization in and around Munich. These institutions host many students and researchers who are studying and working in biomedical engineering domains. Due to distributed locations and diversity of organizational structures, there was an imminent need for bringing these people together on a common platform to share ideas and learn new developments in biomedical engineering. EMB society provides the perfect opportunity to do the same. Hence, we decided to form EMBS student chapter in Munich. We gathered the EMBS student members and took help from our faculty advisors to file a petition for starting a new student chapter in Munich. Our request got the approval from EMBS board on *15th May 2014*, which provided the impetus to organize the inaugural session for our chapter. We invited Prof. May D. Wang for DLP lecture and she kindly agreed. The planning and organization of the event in short time was challenging. However, the great support from EMBS, GSISH and our student team made it possible. This report covers the highlights of the event.

Location

Lecture Hall, IMETUM, Boltzmannstr. 11, 85748 Garching, Germany

Schedule

The event was held on 6th June 2014, Friday afternoon starting from 2:00 PM.

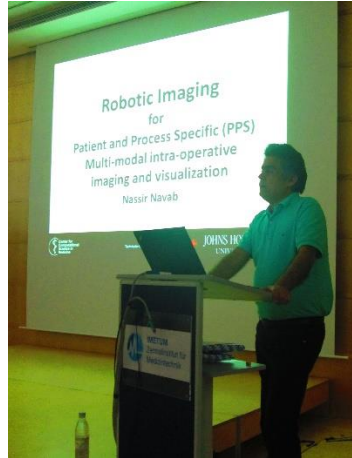
Time	Event	Presenter
02:00	Introduction and Welcome	Dr. Benjamin Frisch Faculty Advisor, Student Chapter Munich
02:05	Overview of IEEE EMBS Student Chapter Munich	Amit Shah Interim Chair, Student Chapter Munich
02:15	Radiation Detector Technology Transfer from High Energy Physics to Medical Imaging at CERN and Positron Emission Mammography	Dr. Benjamin Frisch Research Associate Chair for Computer Aided Medical Procedures & Augmented Reality Department of Computer Science, Technical University Munich
02:45	Computer Aided Medical Procedures and Robotic Imaging	Prof. Dr. Nassir Navab Professor Chair for Computer Aided Medical Procedures & Augmented Reality Department of Computer Science, Technical University Munich & Johns Hopkins University
03:30	Open Discussion over Coffee	
03:45	EMBS Distinguish Lecture: Making Sense of Biomedical Big Data - Integrated Biomedical and Health Informatics for Personalized Health	Prof. Dr. May D. Wang Professor Emory-Georgia Tech Cancer Nanotechnology Center Department of Biomedical Engineering, Georgia Tech and Emory University

Participants

About 40 participants consisting of master students, PhD students, research associates and professors took part in the event. Majority of the participants came from master program in biomedical image computing. The others students were from biological imaging research group. Some students also came from biochemistry background.



Prof. May D. Wang



Prof. Nassir Navab



Dr. Benjamin Frisch



Discussions after Dr. Benjamin Frisch's lecture

Organization Team

Planning: Felix Achilles, Oliver Zettinig, Abhishek Vahadane, Subhamoy Mandal, Katharina Lang, Amit Shah, Dr. Benjamin Frisch, Dr. Petra Dorfner

Publicity: Cristina Precup, Felix Achilles, Abhishek Vahadane, Katharina Lang, Amit Shah

Registration: Yeshaswini Nagaraj, Shweta Shitole

Perspective

The event was very fruitful in terms of bring students from different departments and institutes together. We took feedback from the students and summarize below.

Students,

- Found DLP and other lectures were very interesting and educational
- Interested to become EMBS members
- Interested to participate in the chapter activities
- Wanted more similar lectures, paper presentation and field trips in future
- Suggested better time management in the talks

We are in the process to register our student chapter as a nonprofit club with the local municipal office in order to simplify the administrative procedures in organization of future events. We are also looking forward to hold the elections for the chapter's organization board.

Finally, we are working towards making the student chapter vibrant and active for the collective good of the student community in Munich.

Please contact us if you are interested in getting more information on this event and our other activities.

Glossary

IEEE	Institute of Electrical and Electronics Engineers
EMBS	Engineering in Medicine and Biology Society
GSISH	Graduate School of Information Science in Health
IMETUM	Institute of Medical Technology at Technical University Munich
CERN	European Organization for Nuclear Research