

## **Full-Papers**

### **Best Papers (3):**

1570631202 - Middle School Students Learn Binary Counting Using Virtual Reality

Eric Nersesian, Margarita Vinnikov, Jessica Ross-Nersesian, Adam Spryszynski and Michael J Lee (New Jersey Institute of Technology, USA)

1570627768 - The Preternship - An Academic-Industry Partnership Model for Early Experiential Learning Experiences in Computer Science Curricula

Matthew Morrison, John Dimpel and Emory Smith (University of Notre Dame, USA)

1570631223 - Electrical Engineering Core Course Laboratory Creation for Non-STEM Majors - Christopher Martino; Dan Opila; Brent West; Louiza Sellami; John Stevens; Deborah Mechtel

Christopher Martino, Dan Opila, Brent West, Louiza Sellami, John Stevens and Deborah Mechtel (United States Naval Academy, USA)

### **Honorable Mention (2)**

1570631223 - A three-year retrospective on offering an embedded systems course with a focus on cybersecurity

Ravi Rao (Fairleigh Dickinson University)

1570631219 - Evaluation of a Snake Jaw Robot to Teach Integrated Biology, Mathematics, and Engineering

Lauren Garofalo, Samantha Sandler and Deeksha Seth (Villanova University, USA)

## **Work-in-Progress Papers**

### **Best Paper (2)**

STEM Leadership and Training for Trailblazing Students in an Immersive Research Environment

Marisel Villafaña-Delgado, Erik Johnson, Marisa Hughes and Martha Cervantes (Johns Hopkins University Applied Physics Laboratory, USA); William Gray-Roncal (Johns Hopkins University Applied Physics Laboratory & Preparation Meets Opportunity Foundation, USA)

Experiment design with Galilean beam expanders for magneto-optical traps and the advanced undergraduate laboratory

Jared Matthew Cochrane (United States Military Academy at West Point, USA); Mary Lanzerotti, Corey Gerving, Seth Barbrow and Anthony Dinallo (USMA, USA)

### **Most Authorship in last 10 years**

Abdullah Konak has authored/co-authored 12 Papers

Ralph Tillinghast has authored/co-authored 10 Papers

Sadan Klutarel has authored/co-authored 9 Papers