Closing the collaboration gap between industry and academia

Academic institutions are centers of higher learning. The expectation is that the institution strives to educate the next generation, in our case, of engineers. Is that the reality? In many cases the target for the department, as envisioned by the chair and encouraged by the institution, is to become a “grant pursuing entity”. Many believe that the sole purpose of companies is product development. However, modern-day companies are deeply involved in many aspects of business and research development to keep their processes and products competitive in an evolving market environment.

There is a great deal of opportunity for cooperation to enhance higher education and to provide a highly knowledgeable workforce.

The Panel will discuss various areas where Industry and Academia can partner to prepare the students for the real world and create opportunities for next generation leaders.

We ask the panelists to present a short ppt (5-page/5-mins may be) or a synopsis of their view of the panel topic. Since most of our panelists are from different backgrounds, this gives the panelists and the audience the opportunity to express their viewpoints about challenges, how these are being met and what needs to be addressed.

Once all the panelists have presented, they take turns answering a set of prepared questions intended to stage a robust discussion and incite a more in-depth discussion with the audience.

Panelist biographies are included later in this flyer.

<table>
<thead>
<tr>
<th>Panelist</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert Z. H. Wang</td>
<td>University of California Riverside &amp; ASA</td>
</tr>
<tr>
<td>Valinda Kennedy</td>
<td>IBM University Relations</td>
</tr>
<tr>
<td>Name</td>
<td>Institution</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Eric Hunt-Schroeder</td>
<td>Marvell &amp; University of Vermont, Graduate Student</td>
</tr>
<tr>
<td>John Oakley</td>
<td>SRC</td>
</tr>
<tr>
<td>Dr. Bahram Nassersharif</td>
<td>University of Rhode Island  Capstone Director</td>
</tr>
</tbody>
</table>
Panel Discussion:
Closing the Collaboration Gap Between Industry and Academia

Recruit future leaders
Scientific innovations

- New Products
- Profit and Loss
- Time to market
- Strategic Mergers

Industry Drivers
Academia Drivers

- Funded Research
- Publications
- Enrollment
- Grant Writing

Research Timing
Internships
Capstone Program
Innovation

2022 IEEE MDTS | The 31st Microelectronics Design and Test Symposium, Virtual meeting, May 23-26, 2022
Professor Albert Wang
Dept. of Electrical and Computer Engineering
University of California, Riverside, USA, aw@ece.ucr.edu

Biography:


Valinda Scarbro Kennedy
IBM Global University Specialty Programs Manager

Biography:

Valinda Scarbro Kennedy is the IBM Global University Specialty Programs Manager. Valinda and her team work with higher education leadership worldwide in Medical Institutions and Historically Black College and Universities (HBCUs) providing access to industry resources to bridge the gap between academic programs and high demand career skills. The team works with medical/nursing/life sciences/pharmaceutical institutions and Historically Black Colleges and Universities (HBCU’s) to provide faculty and students industry experiences using IBM’s academic program for no-charge access to resources. The goal is to build critical skills with artificial intelligence, quantum computing, internet-of-things, data science, design thinking, cyber security, blockchain and other hot technology areas through engagement with academic, government and industry leaders to augment education to include the accelerated use of advanced technology into most disciplines.

Now into her 34th year at IBM, Valinda has held a variety of engineering, sales, services and executive management positions. These assignments include: HBCU Strategist, Global universities academic initiative high touch program manager, Management of sales specialist, technical architects and business development,executives, Financial services client unit director, Ecosystem development manager, Market segmentation and development leader, Technical sales and support specialist and manager, Services business development executive, Disaster recovery specialist, Systems engineer. Degrees include a Bachelor’s Degree in Applied Mathematics and an Associate’s Degree in Computer Science from West
Virginia State University in 1987 and 1988. Activities include being a Trustee, Senior Usher and Choir member at Logan Street Baptist Church, Monday Night Ladies Bowling Team Captain and on the advisory boards at West Virginia State University, Bluefield State College and the University of Illinois Chicago Equity and Inclusion in Engineering Program. Valinda is also an on-going mentor to veterans with American Corporate Partners and holds an appointment on Indiana Governor Holcomb’s Cyber Security Executive Council.

**Eric Hunt-Schroeder**

Vermont Professional Engineer  

**Biography:**

Eric Hunt-Schroeder is currently pursuing a PhD in Electrical Engineering at the University of Vermont. His research focus is hardware security and Physical Unclonable Functions working with Dr. Tian Xia. Eric is also a Senior Staff Manager in the Central Engineering Foundational IP group at Marvell Semiconductor located in Burlington, VT. He has 9 years of circuit design experience focused on memory development, ASICs and hardware security. Eric is a licensed Professional Engineer in Vermont and has filed over 40 patents. He received his BSEE from the University of Vermont in 2013 and MSEE from SUNY Binghamton in 2015.

**John Oakley**

Science Director, Semiconductor Research Corporation, src.org

**Biography:**

John Oakley, a Science Director at SRC, is focused on leading Hardware Security (HWS), Packaging (PKG), Automotive Electronics (Auto), AI Hardware and Intelligent Cognitive Assistant (ICA) research. John works closely with government, industry, and university partners to advance these research topics.

John was formerly a RF Control Architect at Intel Corporation, has over 20 years of successful digital design experience at Motorola, Freescale, Fujitsu, and Intel. His willingness to help and mentor, in addition to his deep technical expertise, make him a key member of Intel’s technical team. John has 14 issued patents and has developed more than 55 successful integrated devices, several of which have shipped in high volumes. He has worked in numerous digital system
spaces, and is presently in the transceiver and modem fields focusing on the control planes of cellular platforms. An expert in 3GPP standards and their application to real world devices, John was Vice Chairman of the MIPI Working Group RFFE and a member of the MIPI Working groups RIO and TSG.

Beyond the work environment, John is a Ruby Life Master at Bridge and is an avid player of strategy and role playing games.

**Dr. Bahram Nassersharif**

Director of the Capstone Design Program and the Nuclear Engineering Program at the University of Rhode Island.

**Biography:**

Dr. Nassersharif founded the capstone design program at URI in 2007 and has been continuously directing and teaching capstone design since 2007 at the University of Rhode Island. He is the author of Engineering Capstone Design, CRC Press, 2022, to be released in June 2022. He has over 40 years of experience in research, teaching, and academic leadership as dean of engineering at URI, department head of mechanical engineering at New Mexico State University, Director of the National Supercomputer Center for Energy and the Environment at the University of Nevada, and professor and Director at Texas A&M University, and member of Scientific Staff at Los Alamos National Laboratory. He completed his Ph.D. in Nuclear Engineering at Oregon State University in 1982. He is a member of IEEE, ASME, ACM, AAAI, and a fellow of AAAS.