SCHOLARS AND THEIR MENTORS

INTEGRATED SENSING SYSTEM LAB

Faculty Advisor: Dr. Oliver Brand

INTEGRATED COMPUTATIONAL ELECTRONICS LAB

Faculty Advisor: Dr. Jennifer Harder

INTEGRATED SENSING SYSTEM LAB

Faculty Advisor: Dr. Oliver Brand

INTEGRATED COMPUTATIONAL ELECTRONICS LAB

Faculty Advisor: Dr. Jennifer Harder

ECE POWER ELECTRONICS LAB

Faculty Advisor: Dr. Deepak Raj

ECE POWER ELECTRONICS LAB

Faculty Advisor: Dr. Deepak Raj

THE PROPAGATION GROUP

Faculty Advisor: Dr. Gregory Dorgan

THE PROPAGATION GROUP

Faculty Advisor: Dr. Gregory Dorgan
ADITYA, HONGYU, MOHIT, TYLER AND UGONNA RECEIVE PURA

Aditya Singh, Hongyu Guo, Mohit Singh, Tyler Lizzo and Ugonna Nwankwo [from left to right] have received the President's Undergraduate Research Award. Ugonna and Aditya are working in the domain of "Finite Element Method Modelling of the Heart to Determine the Generative Factors of the Seismocardiogram" and are being guided by Dr. Omer Inan. Hongyu's research focuses on "Quantitative Comparison of iSenSys Multi-sensor Platform to Commercial Gas Sensor Arrays". He has been working in Integrated Sensing System Lab, led by Dr. Oliver Brand. Mohit has been working on "Teleoperation of Semi-autonomous Robots through Dynamic Environments" under guidance of Dr. Patricio Vela. Tyler received PURA for his research titled "LSTM based Model Predictive Control for Heat Dissipation of Bio-Implants" in Sensors and Intelligent Systems Lab led by Dr. Ying Zhang.
ADRIJA RECEIVES RISE INTEL SCHOLARSHIP, GETS ACKNOWLEDGEMENT IN NASA PUBLISHED PAPER

Adrija Bhattacharya has been acknowledged in the publication “Prediction-Based Auralization of a Multirotor Urban Air Mobility Vehicle” by NASA. She has also received RISE Intel Scholarship and Western Digital Scholarship.

EMERALD RECEIVES WOMEN IN ENGINEERING CORPORATE SCHOLARSHIP

Emerald White has been awarded the prestigious SMART Award. She is also recipient of the Women in Engineering Corporate Scholarship from Raytheon Technologies.

INDRAJA ATTENDS SOCIETY OF WOMEN ENGINEERS NATIONAL CONFERENCE

Indraja Chatterjee participated in the Society of Women Engineers national conference in October. About 30 women from the GT Society of Women Engineers chapter went to Indianapolis for 4 days to attend this conference. At the event, she participated in a career fair, listened to keynote speeches from impactful female engineers, and attended sessions revolving around topics involving not only social justice within female engineering but also advice from women in different fields of engineering and discussions for collegiate students and early career professionals.

ORS SCHOLARS PRESENT THEIR PROJECT SUMMARIES

During Research Roundtable Presentation, scholars present the goals and the potential impacts of their research to audience and responds to questions and suggestions. Prior
to presentation, scholars received guidance from Anna Holcomb on how to create formal slides and effectively present to the audience.

ORS MENTORS SHARE STRATEGIES TO PREPARE FOR GRAD SCHOOL

ORS mentors demystify the application process for graduate programs to scholars. They shared how to write a compelling application, network effectively and secure strong letter of recommendation to get admits from graduate programs.

DR. GREG DURGIN EXPLAINS HOW TO WRITE AN ACADEMIC ARTICLE

Dr. Greg Durgin gave a talk on how to write a good technical article for a conference or a journal. He talked about several parameters such as novelty, impact and clarity, on which an article is evaluated. He also explained how the process of peer review works.
ORS Scholars got a chance to talk with engineers from Sandia National Labs. Scottie Beth Fleming and Zach Silva shared their experiences about working at Sandia National Labs, most exciting part of their jobs. They also shared internship and full-time openings with scholars.

Lizzo Takes First Place at TECHCON Conference 2021

Tyler Lizzo received the First Place Undergraduate Research Award at TECHCON 2021 in September for the work "5.8 GHz Low-Power Wearable mioT System." [et al.] The Semiconductor Research Corporation brings industry leaders and university researchers highly involved in microelectroics research together at this yearly event to support advancements in the semiconductor industry. Tyler is part of SRC’s undergraduate research initiative through the Opportunity Research Scholars Program. Tyler’s advisor is Dr. Manos Tentzeris, ATHENA Lab (Adaptive Techniques in Hybrid Electromagnetic Numerical Applications Group).
ORS Students Selected for the Semiconductor Research Corporation JUMP URI

Adrija Bhattacharya, Zhuoqi Cai, Indraja Chatterjee, Ashley Goodnight, John Grilo, Tyler Lizzo, Lindsey Lubin, Bernardo Perez, Lycia Tran, Cynthia Wang, Brandon Young, and Elio Zebatino have been selected to participate in ORS as JUMP (Joint Undergraduate Microelectronics Program) scholars this year. Exposing undergraduates to career opportunities associated with JUMP faculty members and illustrating the benefits of obtaining an advanced degree in a technical area related to microelectronics is the aim of this undergraduate research initiative.

Bhattacharya Receives PURA

Adrija Bhattacharya was selected for the President's Undergraduate Research Award for fall 2021 for the work “Automated Synthesis of Analog Standard Cells Using Mixed Signal Processing”[et al.] Adrija is working in the Integrated Computational Electronics (ICE) Lab under the guidance of Dr. Jennifer Hasler.

Mack Attends Graduate School Workshop

Discerning a route to graduate school takes thought, planning, and self-reflection. Jacob Mack participated in the University of Michigan’s virtual Workshop on Exploring ECE Graduate School September 28-30 as part of his mission to do just that.

Mamuye Receives HKN Outstanding Junior Scholarship

Amran Mamuye, 2020-21 ORS scholar, was the recipient of this award honoring her scholarly achievements, character, commitment to service and her fellow classmates, and contributions to Georgia Tech community.
ORS Year Begins With Kick-Off Event

Dr. Kristine Nagel, ECE Academic Professional, lead scholars in an assessment of personality types at the ORS Kick-Off August 30. As a means to start teams off on solid footing, this activity helped individuals gain a better understanding of themselves as well as those they would be working with. It was an opportunity to learn how individual preferences, responses, and motivations impact how team members interact and what drives the direction of the work and tasks.
Pictured left to right: Lindsey Lubin, Adrija Bhattachaya, Julie Ridings, Jacob Mack, and Nicholas Leon spoke to ECE freshmen and new transfer students at ECE RUSH on 7th September. They shared basic program information about applying as well as eligibility. Additionally, they gave an overview of their personal experience with the program and why it’s been helpful to them in determining their direction in a broad field as well as their professional development.
Balancing Research with Academics

Students navigating a research experience, perhaps for the first time in their college career, often experience a learning curve when it comes to time management. Benefiting from the experience of those that came before them, new scholars learned helpful strategies from seasoned scholars at the ORS Orientation August 24.

Career Events In Full Swing

Texas Instruments, Sandia National Labs, and TTM Technologies connected with students this fall.
Jacob Bruhn, right, Software APPS Engineer with Texas Instruments and GT ECE ORS Alumnus, reviews the resume of scholar, Chandler Mason. (above)

Zach Silva (left, GT ECE Alumnus and R&D Microwave and Sensor Engineer with Sandia National Labs) and scholar Zhuoqi Cai discuss job opportunities at SNL at the ORS/SNL info session. (above)

Meeting virtually, a familiar format for all, Alex Budwey (TTM Human Resources Director), Tomasz Vitas and Kwang Choi (TTM Engineers) spoke of the company culture, job opportunities, and what it’s like living in upstate NY should students go to work at TTM.

Opportunity Research Scholars’ Program
School of Electrical and Computer Engineering
777 Atlantic Drive, NW, E470 Van Leer Bldg.
Georgia Institute of Technology
Atlanta, GA 30332-0250
Tel: 404.894.4707, 770-349-9258

ors.ece.gatech.edu