EECS Undergraduate Announcements for March 19, 2018

Volunteers Needed for CoE Commencement Ceremony

The College of Engineering is currently looking for several students to act as marshals (graduating seniors) and ushers (sophomores or juniors) during the CoE Commencement Ceremony on April 28, 2018. Here are the requirements set forth by the CoE:

- Be willing to represent the department
- Be available to attend rehearsal on Thursday, April 26 (5:30-7:00pm)
- Be available for the duration of the ceremony on Saturday, April 28
  - Marshals will need to arrive by 1:30pm
  - Ceremony is from 3pm-5pm

If you're interested and willing to help, please send an email to:
eceadvising@umich.edu (EE and CE students)
uadmin@eecs.umich.edu (CS and DS students)

Undergraduate Research Opportunity at Oakland University

The ECE department at Oakland University will be hosting ApREECE, a paid 10-week summer program for undergraduate to experience research and development in cutting-edge interdisciplinary projects in various areas of electrical and computer engineering. The program pays $5000 plus food, housing, and travel. We are seeking 10 talented and motivated undergraduate students to participate in this exciting opportunity. No prior research experience is required. For more information, please visit the website www.eecs.oakland.edu/apreece. Application deadline is April 2, 2018.

2018 AMALTHEA REU: Apply by April 3

An opportunity for a 10-week research experience for undergraduate students is available in the area of Machine Learning. The program is sponsored by the National Science Foundation and is offered by the Information Characterization & Exploitation (ICE) Laboratory at Florida Institute of Technology (FIT) in Melbourne, Florida.

Machine Learning (ML) gradually evolved as a branch of Artificial Intelligence with its theory and applications positioned at the juncture of Computer Science, Engineering, Mathematics, Statistics and, even, Physics. Nowadays, ML’s role in successfully addressing hard, real-world technological challenges has become ever more current and central. Moreover, its presence and importance now permeates several aspects not only of cutting-edge technology such as computer vision, stock market prediction and big data analytics, but also our daily life through voice-driven searches on our smart phones or movie recommendations on video streaming services to name only a few.

For more information, including eligibility requirements and how to apply, please visit http://www.amalthea-reu.org

Accelerated Master’s Degree in Bioinformatics

Bioinformatics is a modern interdisciplinary field using computing, mathematical modeling and/or statistical analysis applied to biological or medical data, often every large ("BIG") data. This is very much a growing field with much potential for the future, and excellent job prospects in academia, the pharmaceutical and biotech industry and hospitals.

With increasing electronic health records, multiple biomarker and genetic datasets accessible, a Masters in Bioinformatics is also useful training for future physicians. Currently, there are about 20 MS students and more than 40 PhD students in the UM Bioinformatics Graduate Program.
In 2018, the Bioinformatics Graduate Program, which is housed in the Medical School, established an Accelerated Master’s Degree Program (AMDP). The purpose of this program is to allow students to complete their undergraduate degree, plus a Bioinformatics Master’s degree, in 5 years. Undergraduates should meet with a Bioinformatics advisor to determine course options prior to applying in their junior year. Admitted students complete coursework in their final year of undergraduate study, and register as a Rackham student in their final, fifth year.

The application deadline is April 1. Please contact Julia Eiusen, Bioinformatics Graduate Program Coordinator, to set up a course advising session.

Highlights:
- you must have a GPA of at least 3.2
- no GRE is required
- up to 15 credits can be transferred from your undergraduate major
- of these 15, up to 9 credits can be double counted for major electives and the MS
- you will do original research under supervision, either in a U of M lab for credit, or during paid summer internships
- courses are listed at [https://www.medicine.umich.edu/dept/dcmp/education/courses-curriculum](https://www.medicine.umich.edu/dept/dcmp/education/courses-curriculum)

We highly recommend contacting the program early for advising. Please read information on the website for further details about the program and a link to the online application.

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**Studying Student Attitudes Towards Admissions Practices in Higher Education**

A doctoral student at Arizona State University is conducting a study that looks at student attitudes towards higher education admissions policies. As a thank you, you will be entered into a drawing to receive one of three $100 Amazon gift cards.

The survey will take about 10 – 15 minutes. You may skip any of the survey questions. Resulting data will be aggregated. You and your institution will not be identified in any resulting reports. Your participation is voluntary. If you have any questions, please call me at 480-727-5216. Participating in the survey indicates your consent for data you provide being contributed to the study.

Please follow [this link](https://asu.co1.qualtrics.com/jfe/form/SV_6YGyPT29GZ6C0wEj) to the survey or copy and paste this URL into your browser: [https://asu.co1.qualtrics.com/jfe/form/SV_6YGyPT29GZ6C0wEj](https://asu.co1.qualtrics.com/jfe/form/SV_6YGyPT29GZ6C0wEj)

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance at (480) 965-6798. Please let me know if you wish to be part of the study. For questions, contact Lydia Ross (Lydia.Ross@asu.edu).

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**Summer Programmers Needed**

**Center for Ergonomics - IOE Department**

**U of M College of Engineering**

**Job Description:**

- Join a team working on commercial ergonomics software packages used by major companies such as Boeing, NASA, Ford, and GM
- Work in an environment where your input as a programmer is valued; you will likely be assigned to implement your own suggestions
- Flexible hours

For more information, including how to apply, see [this flyer](https://asu.co1.qualtrics.com/jfe/form/SV_6YGyPT29GZ6C0wEj).

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**Ford Lecture Invitation**

**Wednesday, March 28 @ 4:00pm**

**Ross School of Business Robertson Auditorium**

**From Bits to Qubits: A Quantum Leap for Computers**

The steady increase in computational power of information processors over the past half-century has led to smart phones and the internet, changing commerce and our social lives. Up to now, the primary way that computational power has increased is by adding more transistors to chips. As we approach the physical limits of miniaturization, and0
that the electronic components have been made smaller and smaller, but within the next decade it is expected to reach the fundamental limits imposed by the size of atoms. However, it is possible that further huge increases in computational power could be achieved by building quantum computers, which exploit new ways of the laws of quantum mechanics that govern the physical world. This talk will discuss the challenges involved in building a large-scale quantum computer as well as progress that we have made in developing a quantum computer using silicon quantum dots.

*This information is sent on behalf of the individuals listed in each announcements. These opportunities are not directly affiliated with the EECS Undergraduate Advising Office.*

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