

Promoting Diversity in Engineering: Exposing Students before Undergrad



Lynford Goddard
Associate Professor, Electrical and Computer Engineering

CURRENT RESEARCH

Enabling underrepresented students to participate in research

Today you will make your own solar cell. Start by precipitating a thin layer of silver onto a silicon wafer and we'll go outside and see how much current you can generate. Does this sound too complicated for anyone outside of academics? Not quite. In fact, Dr. Lynford Goddard, Associate Professor of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign, is reaching out to high school students from diverse backgrounds to teach them that complex engineering is within their reach and can be fun too! Dr. Goddard is motivated by the hope of bringing different perspectives and backgrounds to engineering in order to solve interesting problems by making sure all populations are represented and by providing accessible career paths for minority and disenfranchised students. His current outreach is focused specifically on encouraging high school girls with the goal of increasing the representation of women in STEM fields.

Dr. Goddard's efforts have an immediate effect on the development of the next generation's engineering workforce. There has been significant growth in the importance of electronics and photonics in our everyday lifestyles including smart devices, high data rate communication systems, and medical sensors. Therefore, helping to create the scientific foundations for aspiring students will facilitate their careers as future inventors and engineers. Additionally, it is not just teaching students STEM topics, but rather creating a high caliber and inspirational experience. Dr. Goddard and his team leverage state-of-the-art facilities at the University to enable high school students to learn about cutting-edge science and engineering topics with hands-on projects unparalleled...

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AFFILIATION



University of Illinois Urbana-Champaign

EDUCATION

- B.S., in Physics & Math, 1998 , Stanford University
- M.S., in Electrical Engineering, 2003 , Stanford University
- Ph.D., in Physics, 2005 , Stanford University

AWARDS

- AAAS Early Career Award for Public Engagement with Science
- Presidential Early Career Award for Scientists and Engineers (PECASE)
- ECE Ronald W. Pratt Faculty Outstanding Teaching Award
- University of Illinois Engineering Council Award for Excellence in Advising
- Senior Member in Professional Societies

RESEARCH AREAS

Education, STEM

FUNDING REQUEST

Your contributions will support the continued outreach of Dr. Lynford Goddard, of the University of Illinois at Urbana-Champaign, as he makes engineering accessible, especially to underrepresented populations. Donations will provide scholarships for GLEE campers (each camper's cost is \$1,050). Larger donations will allow for wider recruitment of students from lower socioeconomic regions and/or enable additional teachers to participate in the RET (each teacher's cost is \$9,500). Therefore, both small and large donations can have a profound effect on promoting the sustainability of Dr. Goddard's programs. Improve access to the sciences; support Dr. Goddard's outreach programs!