Sanchit Sinha
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Schooling

University of California – Santa Cruz (UCSC) — Santa Cruz, CA
Dean's Honors — September 2015 - June 2019
Candidate for Bachelor of Science in Electrical Engineering and Computer Science
Relevant Courses: Data Structures, C programming, Linear Algebra, Computer assembly, Physics

Casa Grande High School — Petaluma, CA
GPA: 3.7 — August 2011 - June 2015
ACT: 31
Relevant Courses: Calculus, Macroeconomics, Psychology, Physics, Statistics

Skills

Software: Microsoft suite, Solidworks, Matlab, Adobe After Effects, Audition, Photoshop, Gimp, 3ds Max
Programming: HTML5, Java, Python
Laboratory: formulation development, stability tests
Hardware: Desktop Assembly, Welding, Soldering, Woodworking

Experience

Petaluma, CA
Dow Pharmaceutical Sciences — June 2016 – August 2016
Intern
As an intern, I back up and analyzed the data server for their electronic laboratory equipment. I create formulations for research and developmental purposes with a small team. I learned how to use laboratory equipment such as propeller mixers and homogenizers. I test the formulations for stability using lights sensitivity and temperature tests. When I am not working on a project, I shadow different analytical scientists as they show me how they formulate a standard test method of a new topological drug.

Association of Computing Machinery – UCSC
Secretary
ACM – UCSC branch is an organization in which students with an interest in computer science can come together and develop their interests. I organize workshops of all skill levels: from setting up integrated desktop environments for different languages to teaching how to implement different data structures. I also help setup tech talks and visits to business campuses in order to give members information in the industry.

Santa Cruz, CA
Formula Society of Automotive Engineers - UCSC — September 2016 - Present
Electrical team member
FSAE is club in which teams from various universities compete in electrical vehicle racing. I was a part of the first ever UCSC team for this competition. I designed schematics for the electrical layout for our vehicle. I also helped out in other sub-teams of FSAE such as garnering support for fund-raising and welding the chassis.

Santa Cruz, CA
Institute of Electrical and Electronics Engineers - UCSC — September 2015 - Present
Web developer
I maintain and develop the IEEE website by keeping it up to date with upcoming events and meetings. I also ensure that any and all information from the club reaches all students throughout UCSC in search for potential members. To accomplish these tasks, I continually improve my abilities in HTML5 and visually document our projects through pictures and videos.

Projects

Hill Cipher
Python 3
I created a simple python script that would encode and decode a message using a Hill cipher. The message is matched with a numeric value and concatenated into a matrix. This matrix is multiplied by a cipher to scramble the message. The modulus inverse of the cipher is taken to generate key matrix which is multiplied to the scrambled message in order to reveal it. I am using the same process pixels in an image.

Activities

Symphonic Band — Petaluma, CA
Percussionist — August 2013 – June 2015
I played a variety of percussive instruments with advanced musical notation and rhythms including but not limited to snare, bass, timpani, and marimba.