Anastasia Shuler

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A hard working, dedicated, and creative engineering student with excellent problem solving and interpersonal skills looking for a challenging position to put my knowledge and abilities to productive use.

Education

University of California, Berkeley   *Berkeley, CA*
BS, Mechanical Engineering, EECS Minor   *May 2016*
GPA: 3.83 (Technical GPA: 3.91)

Work Experience

EE16B Course TA   **January 2016 – Present**
Currently employed at the **University of California, Berkeley** as an Undergraduate Student Instructor (UGSI) for the *Designing Information Devices and Systems II* course. Duties include designing lab content as well as leading lab sections.

Engineering Intern   **May 2015 – August 2015**
Worked as an intern with **Ford Motor Company** as a crash safety intern. Duties include analysis of crash structures through Finite Element Analysis as well as simulations written in MATLAB. The main focus was the analysis of full frontal collisions to determine the effects of mass on vehicle and occupant acceleration.

EE40LX MOOC Course Facilitator   **January 2015 – September 2015**
Currently working with **BerkeleyX** and **EdX** under Professor Maharbiz as an online facilitator for an Electronic Interfaces course. Duties include forum moderation, question answering, and guiding students throughout the course.

 Simulations and Modeling Intern   **June 2014 – August 2014**
Worked at **Agilent Technologies** as an intern modeling gas chromatography. Duties included using COMSOL to model a simple diffusion process through a capillary, as well as writing a Random Walk program in MATLAB to simulate the complexities of compressible fluid flow.

Projects

Random Walk Simulation for Gas Chromatography   **Summer 2014**
A simulation project completed as an intern for Agilent Technologies to determine the effects of a spatial temporal temperature gradient. Gas flow through a column was studied using a random walk model to simulate diffusion while also incorporating compressibility and temperature effects.

MEMS Fiber Optic Splitter   **Fall 2013**
A conceptual design project for *Introduction to MEMS.* A small mechanical device was designed that would split a single optical input between two outputs. The project included the original concept design, CAD for the structural and sacrificial layers, and analysis for the mechanical aspects of the system. Designed for the Sandia SUMMiT V process.

PIC-HU: Pic Home-Unit   **Spring 2012**
An innovative home control system based of the commercial X10 system. Allows for the remote control of electrical systems by utilizing the existing electrical wiring of the home. Small pulses are injected into the power line encoding a desired instruction that is decoded by the receiver. Published in the June 2015 issue of Circuit Cellar.

Relevant Coursework

Engineering Design and Analysis, Introduction to Solid Mechanics, Thermodynamics, Basic Engineering Design Graphics, Introduction to MEMS, Engineering Mechanics II, Mechanical Behavior of Engineering Materials, Introduction to Microelectronic Circuits, Fluid Mechanics, Dynamic Systems and Feedback, Heat Transfer, Microfabrication Technology, Introduction to Mechatronics, Finite Element Analysis, Signals and Systems, Introduction to MEMS Design, Introduction to Continuum Mechanics, Combustion Processes, Linear Integrated Circuits

Computer Science Coursework:
 Data Structures and Programming Methodology, Python for Programmers, Introduction to Computer Programming for Engineers.

Skills and Experience

Certified SolidWorks Associate
SolidWorks, AutoCad, AutoDesk Inventor
MATLAB, Python, Java

HyperCrash/HyperWorks (Finite Element suite)
Machine Shop experience
CNC mill experience (SYL X6 mill and MasterCam Software)

Awards and Affiliations

UC Berkeley Dean's Honors List
President/Student Relations Chair of UCB Pi Tau Sigma (Mechanical Engineering Honor Society)
President of the UCB Computer Science Undergraduate Association (CSUA)
Tau Beta Pi (Engineering Honor Society)