

# Daniel Smith

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**Objective:** *US citizen looking for Summer 2021 Internship or Co-Op in Software Engineering or Data Science*

## **Education**

**University of California, Los Angeles**

**Major:** B.S. - Computer Science    **Honors:** Dean's Honors List    **Major GPA:** 3.724

**Sept 2019 - June 2022**

**Laney Community College & UC Berkeley Extension Program - Oakland, CA**

**Major:** CIS Advanced Computer Programming    **Major GPA:** 3.900

**Aug 2018 - May 2019**

## **Programming Languages & Skills**

**Advanced:** C++   C   Python   HTML   CSS   Linux   Vim   Visual Studio   Git   NumPy   Pandas   PyTorch

**Proficient:** Java   JavaScript   R   MySQL   Scheme   Bash   React   Bootstrap 4   Node.js

## **Relevant Courses**

Data Structures in C++ | Computer Organization | Neural Networks and Deep Learning | Algorithms & Complexity  
Operating Systems Principles | Computer Network Fundamentals | Data Science Fundamentals | Probability Theory

## **Projects**

**ACM AI Research Portal**

**Oct 2020 - Present**

- Currently constructing a research portal from scratch using HTML, CSS, JavaScript and React to connect students with AI research opportunities at UCLA
- Collaborating with 7 other ACM officers in building the front end of the website, using HTML/CSS and React to display information on current research for potential labs interested in working with undergraduate students

**Vanity Smart Mirror**

**Oct 2019 - Dec 2019**

- Designed Smart Mirror interface for students, which implements Amazon Alexa as a voice kit and displays useful information such as a calendar and important events for the day
- Led a team of 3 people in navigating through several thousand lines of Python and JavaScript documentation to install and modify existing modules for the mirror, allowing for more customization based on user's preference

**Robotic Crane**

**Sept 2019**

- Fashioned a robotic crane with 5 other people out of 3D printed parts and laser cut wood, controlled by an Arduino
- Wired Stepper and Servo motors to Arduino pins and programmed it to deliver varying power based on input signals
- Developed Smartphone App for Android using JavaScript to send input signals to an Arduino via Bluetooth enabling for remote control for up to 15 feet away

## **Experience**

**Bioinformatics Undergraduate Researcher - Scalable Analytics Institute**

**Mar 2020 - Present**

- Worked under Professor Wei Wang and PhD candidate, Guangyu Zhou, to implement the PSIBLAST algorithm on the UniRef90 database, increasing the amount of available testing data for our neural network
- Created Python algorithm using NumPy and Pandas to parse and eliminate erroneous data in the resulting PSSM (Position Specific Scoring Matrix) from the PSIBLAST Algorithm, allowing for more efficient and compact data to be processed and stored by up to 15%
- Interpreted several dozen Machine Learning models in PyTorch, primarily LSTM models to implement a model that reads in protein sequences from the PSIBLAST Algorithm

**Hackathon Organizer and Transfer Mentor - UCLA Transfer Bridge**

**June 2020 - Oct 2020**

- Developed and led workshops on Python and Data Structures in C++ to prepare transfer students with the skills and knowledge necessary to succeed at UCLA
- Organized an online Electric Car Hackathon with Electrical and Computer Engineering Professor, Gregory Pottie, as well as 3 Graduate Students for 60 incoming Transfer Students
- Managed the logistics of buying and distributing electronic motors and Arduinos necessary for the online Hackathon to over 20 teams, as well as assisted in the creation of the scoring rubric used by the judges

## **Leadership**

**Professional Development Chair - Theta Tau: Professional Engineering Club**

**May 2020 - Present**

- Supervised Professional Development Committee on implementing a mentorship program where alumni would be paired with current members to guide and assist them through the internship recruitment process
- Invited alumni working in industry as guest speakers to talk about their experiences and expose current members to different possible careers within industry

## **Awards**

**Hackathon 1<sup>st</sup> place Winner - UCLA Engineering Transfer Bridge**

**Sept 2019**

- Awarded a total of \$1,600.00 and a signed certificate by Dean Jayathi Murthy, Associate Dean Richard Wesel and the 2019 Electrical and Computer Engineering Department Chair, Professor Gregory Pottie, for completion of a 3 week Bridge Program and overall 1st place winner in code, design and functionality for a Robotic Crane Hackathon