

# Ethan J. Shang

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US Citizen

**Profile:** Innovator and leader in the design and development of user-facing, data-driven products that leverage cloud services and machine learning, with interest in production management

## Education

**University of California, Berkeley**, Class of 2021, GPA: 3.76, Computer Science GPA: 3.86

*Dean's List* ✧ *Regents' and Chancellor's Scholar*

**Major:** Electrical Engineering & Computer Science, College of Engineering **Minor:** Data Science

## Employment and Work Experience

### Microsoft | Software Engineer Intern

Summer 2019 Office 365 product development using Microsoft Azure cloud services to transform big data into enterprise- and personal-level productivity services with machine learning features  
Delivered workplace analytics for engagement and efficiency; reached 100+ million users

### University of California, Berkeley | Department of Electrical Engineering and Computer Science

Fall19 semester Student Instructor: salaried course staff for Database Systems (~700 students)

Sp19 semester Computer Science Mentor: course staff for Data Structures

Sp18 semester Research Assistant for RISELab: streamline and integration of machine-learning techniques

### Lawrence Livermore National Laboratory | Software Engineering Intern

Summer 2018 Data analytic tool to improve supercomputer performance—automate analysis by integrating disparate data; created query language and parser for queries via web-based dashboard

Summer 2017 Data mining and assessment of the Department of Energy's vast network to improve threat detection; Leadership role in developing autonomous analytical software from the ground up

Summer 2016 Network data monitoring of mobile devices to improve workplace efficiency

## Skills and Abilities

- **Programming languages:** Java, Python, C, C#, C++ , Swift, Scala, Bash, SQL, Scheme
- **Big Data:** automation, aggregation, datamining, query design, and resource-management applications
- **Network Security:** Data mining, packet/protocol analysis, encryption, cryptography, wireless penetration
- **Coursework:** Efficient Algorithms, Database Systems, Principles of Data Science, Data Structures, Computer Architecture, Operating Systems, Discrete Math and Probability, iOS Design/Development

## Leadership Experience

**Product team lead | iOS app "Check-Mate"** 2018–present

Cloud-based cost-sharing tool with integrated messaging and payment requests using Firebase

(*Award:* Most Innovative App, voted by UC Berkeley faculty)

**Livermore Area Youth Advisory Commission | Commissioner** 2015–2017

Leadership role on citywide commission to help youths in underserved demographics with academic pursuits

**Lawrence Livermore National Laboratory | Technical Lead** May – Aug. 2017

Managed development of analytics tool collaboratively, interfaced with team members of diverse disciplines

## Notable Awards

- UC Berkeley Regents' and Chancellor's Scholarship — Top 3% of Berkeley students
- National Merit Scholarship Finalist — <1% of U.S. high school seniors
- California Legislature Assembly Certificate of Recognition, 2017
- National Certificate of Merit in Piano, Level 10; Fusion Soccer Athlete-Scholar of the Year
- Recipient of seven merit-based scholarships in science and engineering