# Ethan J. Shang

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**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. Transformed big data into enterprise- and personal-level productivity services with machine learning features.

# 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 via web-based dashboard
Summer 2017	Data mining and autonomous analytical tool to improve threat detection (team lead)
Summer 2016	Network data monitoring of mobile devices to improve workplace efficiency

#### Skills and Abilities

- o **Programming languages**: Java, Python, C, C#, C++, Swift, Scala, Bash, SQL, Scheme
- o Big Data: automation, aggregation, datamining, query design, and resource-management applications
- o Network Security: Data mining, packet/protocol analysis, encryption, cryptography, wireless penetration
- Coursework: Efficient Algorithms and Intractable Problems, Intro to Database Systems, Principles of Data Science, Data Structures, Computer Architecture, Designing Information Devices and Systems, Discrete Math and Probability, Electricity and Magnetism, 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**

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