# Ratan Kaliani

linkedin.com/in/ratankaliani/ | ratankaliani@berkeley.edu | github.com/ratankaliani

#### **EDUCATION**

# University of California, Berkeley

B.S. Electrical Engineering & Computer Science

Expected May 2022

Coursework: Data Structures & Algorithms, Computer Programs, Intro to Electrical Engineering, Multivariable Calculus, Entrepreneurship

#### Thomas Jefferson High School for Science and Technology

Jefferson Diploma; Computer Science

Weighted GPA: 4.45

Accomplishments: National Merit Finalist, Silver Medal – Cisco Innovation Challenge, Best Delegate – NAIMUN LV, SAT: 1560 *Coursework:* Artificial Intelligence, Parallel Computing, Mobile & Web Application Development, Automation & Robotics

#### PROFESSIONAL EXPERIENCE

## Blockchain @ Berkeley | Berkeley, CA

# Full-Stack Software Developer (Consulting)

Feb. 2020 - Present

- Developed full-stack dApps (decentralized apps) and proofs-of-concepts for Fortune 500 clients and internal projects.
- Interfaced directly with blockchain-related platforms, languages, and concepts (i.e. Solidity, Truffle, Ganache, Ethereum)
- Built Microgrid, a web-based blockchain-based energy sharing platform that optimizes prices in existing energy markets by 54%

#### Cisco Systems, Inc. | Washington D.C.

Software Intern

June 2018 – July 2018

- Leveraged Python and R to develop a model from 1M+ real-time datapoints to better the efficiency of the reconstruction of Puerto Rican computer network infrastructure alongside the Cisco TacOps Team in the aftermath of Hurricane Maria
- Created Unifi, a biometric infrastructure technology product that simplifies public transportation through big data and the integration of disparate transportation systems into a single interface, to the Senior VP of Cisco's US Public Sector Organization.

#### Hitachi Vantara (REAN Cloud) | Herndon, VA

## Amazon Web Services Intern

July 2017 – Aug. 2017

- Collaborated with CEO and CTO to deploy a dynamic, efficient solution for delivering company information to an array of clients, contractors and employees increasing user interaction by 550% to thousands of unique requests across North America & Asia
- Developed and published the first public corporate Alexa Skill for REAN Cloud implementing NodeJS and AWS (Lambda, EC2)

#### **SKILLS & INTERESTS**

- Programming Languages: Java, Python, C, C++, SQL, HTML/CSS, JavaScript, R, Swift
- Frameworks: Flask, Google Cloud Platform, AWS, Git, NumPy, Pandas, MERN Stack, MEAN Stack, Android Studio, XCode
- Interests: Full Stack Development, Financial Blockchain, Internet of Things, Big Data, Basketball, Table Tennis

## **PROJECTS**

# LevBuy (Automated Cryptocurrency Bot) | Co-Founder and Developer

May 2019 – Aug 2019

- Developed an automated bot that buys shares of P2P cryptocurrencies on the Ethereum blockchain via Compound, a platform providing interest and borrowing on the open financial market. Modeled data visualizations of market margins with R.
- Collected a 74% profit margin over a three-month period completing purchases into underleveraged BAT, DAI, SAI & USDC
- Built with Python, JavaScript, Flask, Pandas, Compound API, MERN Stack

# DeepMotions (Real-Time Sentiment Analysis) | Creator

Sep. 2018 – May 2019

- Realtime emotion recognition platform for groups that identifies & categorizes users via audio files that slashes manual emotion recognition processing time for multi-user audio by 93%.
- Built with DeepAffects Machine Learning API & Google Cloud NLP API, JavaScript, Python.

# Rumble (Earthquake Identifier) | Creator

Mar 2018 – Jun. 2018

- Developed a simple, easy-to-use Android mobile application that informs users of nearby natural earthquakes through real-time location-based push notifications. Provides key earthquake safety techniques to spread natural disaster preparedness.
- Built with Android Studio, Java, USGS Earthquake API, Google Maps API, Google Firebase.

## LEADERSHIP & EXTRACURRICULAR EXPERIENCE

#### Venture Strategy Solutions | Berkeley, CA

Startup Strategy Consultant - Hudl, Ginger Labs

Sept. 2019 – Present

- Performed extensive research to recommend the optimal expansion verticals for Ginger Labs, assessing viability of potential markets.
- Created and implemented high-growth, unique advertisement strategies leveraging innovations in UI/UX design.
- Present comprehensive strategy and data analysis in professional decks for midterm and final deliverables to C-level executives.

# Project BEST | Fairfax, VA

Director of Outreach

Oct. 2017 - May 2019

• Established weekly STEM activities at 23 Project BEST middle school chapters in Virginia, New York, Kansas & Maryland over a 2 year period. Hosted 280 middle school students from 56 Mid-Atlantic schools at annual STEM Conference - SCi2YC.