

Ratan Kaliani

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Education

University of California, Berkeley

Berkeley, CA

B.S. IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE (EECS)

Expected: May 2022

- **Coursework:** Computer Science 61B (Data Structures, Java), Computer Science 61A (Structure and Interpretation of Computer Programs, Python), Electrical Engineering 16A & 16B (Designing Information Devices and Systems), Math 53 (Multivariable Calculus)

Thomas Jefferson High School for Science and Technology

Alexandria, VA

JEFFERSON DIPLOMA; COMPUTER SCIENCE RESEARCH; GPA: 4.45

Graduated: June 2019

- **Coursework:** Parallel Computing (C), Artificial Intelligence (Python), Mobile/Web Application Development & Research (Java/nodeJS).

Experience

Venture Strategy Solutions

Berkeley, CA

STRATEGY CONSULTANT

Sep 2019 - Present

- Consulted for Hudl, a series D sports analytics company, and developed executable plans and platform mockups to drive user engagement
- Investigated the issue of user engagement through UI/UX research and conducted data analysis into unique advertising techniques breaking from traditional advertising models to increase user traffic and enhance user product retention.

Cisco Systems, Inc.

Washington, D.C.

SOFTWARE EXTERN

Jun 2019 - Jul 2019

- Leveraged Python and R to draw insights from 1M+ real-time datapoints utilizing an implementation of A* algorithm to improve the efficiency of the rebuilding of Puerto Rican computer networks alongside the Cisco TacOps Team in the aftermath of Hurricane Maria.
- Presented Unifi, a conceptual biometric technology application intended to simplify public transportation through big data and the seamless integration of disparate transportation systems into a single interface, to a panel of Cisco Executives through the Capstone Innovation Challenge

REAN Cloud, LLC.

Herndon, VA

AMAZON WEB SERVICES (AWS) INTERN

Jun 2017 - Aug 2017

- Collaborated with CEO and CTO to deploy a dynamic, efficient solution for delivering company information to an array of clients, customers, contractors and employees through interactive and user-engaging mobile and Amazon devices to handle 200 unique requests per day.
- Developed the first public corporate Alexa skill for REAN Cloud implementing nodeJS and AWS (Lambda & EC2 & RDS) frameworks

Projects

DeepMotions (Real-Time Sentiment Analysis) (github.com/ratankaliani/DeepMotions)

Sep. 2018 - May. 2019

TECHNOLOGIES: DEEPAFFECTS API, NODEJS, GIT, PYTHON, JAVASCRIPT, HTML/CSS, BOOTSTRAP

- Utilized the applied ML DeepAffects API in coordination with a dynamic MySQL database to push an asynchronous audio analysis based real-time emotion recognition platform that slashes manual emotion recognition processing time for multi-user audio by 93%

Rumble (Earthquake Identifier) (github.com/ratankaliani/Rumble)

Mar. 2018 - Jun. 2019

TECHNOLOGIES: USGS EARTHQUAKE HAZARDS API, ANDROID DEVELOPMENT STUDIO, JAVA, C++, JAVASCRIPT

- Leveraged the real-time USGS earthquake API to develop an streamlined mobile application that informs users of nearby natural disasters and earthquakes through push notifications and provides key earthquake safety techniques to spread awareness of natural disaster preparedness

Leadership

InventDC

Washington, D.C.

FOUNDER & PRESIDENT

Jan. 2017 - Aug. 2019

- Led a team of 12 organizing a day-long student-run corporate innovation challenge for 50 selected high school innovators in Washington D.C.
- Coordinated with executives Cisco, WWT and the Richard Slivoskey Grant Foundation to secure \$3500 worth of sponsorships for the event.

Project BEST

Fairfax, VA

EXECUTIVE DIRECTOR OF OUTREACH

Sep. 2017 - Aug. 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 unique schools across the D-M-V region at our day-long annual STEM Conference - SCI2YC.

Technical Skills

- **Languages/Technologies:** Python, Java, JavaScript, C, HTML/CSS, SQL, AWS Lambda/EC2/RDS, Flask, RESTful APIs, nodeJS, TensorFlow, Git.
- **Interests:** Internet of Things, Big Data Analytics, Artificial Intelligence, Cryptocurrency, Financial Blockchain, Table Tennis

Honors & Awards

2018 **2nd Place Winner**, Cisco DC Innovation Challenge

Washington D.C.

2019 **National Merit Finalist**, National Merit Scholarship Corporation

Evanston, IL, U.S.A

2018 **Silver Division**, USA Computing Olympiad

Clemson, SC, U.S.A

2018 **Best Delegate**, North American Invitational for Model UN

Washington D.C.