

# ADITYA VARSHNEY

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## EXPERIENCE

### INFORMATION SECURITY DATA SCIENCE INTERN

#### APPLE — SUMMER 2019

- › Built a network analysis platform that significantly sped up Threat Response and Vulnerability Management investigations into network breaches
- › Used state-of-the-art Community Detection, Role Extraction, and Anomaly Detection algorithms to provide teams key network behavior information
- › Used Flask and React for visual graph exploration and investigation

### MACHINE LEARNING AND SOFTWARE ENGINEERING INTERN

#### LINC GLOBAL — SUMMER 2018

- › Integrated Named Entity Recognition into Linc's chatbot framework to improve overall chatbot intelligence by detecting product words in customer sentences
- › Helped design and deploy a new chatbot conversation architecture that reduced conversation turns by 25-100% by matching product entities from a customer's query with items in the customer's profile
- › Built a Sentiment Classifier to help Linc understand customer satisfaction, later used as a metric for overall chatbot effectiveness

### ALGORITHMS INTERN

#### SNAP-ON DIAGNOSTICS — SUMMER 2017

- › Used mathematical modeling and algorithms to find patterns in hex data to allow the vehicle diagnostics scanner to expand services to different vehicles
- › Built a Python app that allowed analysts to create scripts to test for data patterns and discover possible data trends via Excel charts and formulations

## PROJECTS

### TWITCH RECOMMENDATIONS — FALL 2018

- › Created web app that suggested new streams to Twitch users based on various profile statistics and the streamers and games they follow
- › Built using Python, sklearn, FireBase, and the Twitch API

### SECURE SERVER — SPRING 2018

- › Designed and implemented a secure storage system that used encryption, signatures, and hashing to ensure integrity, authenticity, and confidentiality of client file data even when the file server itself was compromised



### SUSA DATA SCIENCE CONSULTING — 2018-19

- › Consulted with the Bay Area MTC to chart Bay Area demography predictions from 2010 to 2050 to guide regional traffic policy (i.e. extending BART lines)

### ECHOLESS — FALL 2017

- › Used NLU APIs to find the most politically charged keywords in an online influencer's tweets and find the user's position on a political spectrum
- › Used Python, D3.js, Google NLU, Watson NLC, HTML, CSS

## CONTACT

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## EDUCATION

UC BERKELEY, EECS

Electrical Engineering &  
Computer Science, BS, 2020

## INTERESTS

LANGUAGE PROCESSING  
INFORMATION SECURITY  
MACHINE LEARNING  
DATA SCIENCE  
EDUCATION  
COMPUTER VISION  
SOFTWARE ENGINEERING  
TEAM LEADERSHIP

## LEADERSHIP

BERKELEY ANOVA  
PRESIDENT

- › Teaching computer science at under-resourced schools in the East Bay since entering college
- › Run 17-person officer team meetings, partner with 10 middle and high schools, organize annual overnight hackathon for 100+ students, help organize club events for 70 people