

# CHIRAG TOPRANI

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**EDUCATION** UC San Diego 2015 - 2019 B.S. / Major: Computer Science GPA 3.9 / Minor: Economics

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## EXPERIENCE

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**lyft / Software Engineering Intern** (Growth / AdTech) / *Python* 9/18-12/18

- Using ML to model and optimize Paid Acquisition Channels.
- Designing and developing large scale Marketing Automation.

**facebook / Software Engineering Intern** (Detection & Security Infra) / *Haskell, Hack, Python, SQL* 6/18-9/18

- Developed end to end Anti Scraping framework for understanding, detecting, and preventing bad actors at the data model layer.
- Rewrote feature collection pipeline to collect high fidelity scraping data. Integrated with ML pipeline to improve accuracy by over 4%.
- Optimized read/write performance at big data scale by over 5 million QPS across Facebook stack.

**facebook / Software Engineering Intern** (Audio 360) / *C, C++, Python, JS, libuv* 6/17-9/17

- Developed full-fledged audio plugin framework using a rich stack: a custom lightweight C++ server with a React UI.
- Improved data encoding efficiency by 28% using a custom networking protocol.
- Implemented and optimized multithreading to allow high frequency read/writes for concurrent clients.

**CISCO / Software Engineering Intern** (Cisco UCS) / *JS* 6/16-9/16

- Worked on Cisco's UCS Director product that delivers Infrastructure as a Service (IaaS) management software for data centers.
- Used JS to develop over 30 distinct UX features. Used telemetry data to create live graphs of data center resource usage.

**UCSD CSE Department / CSE Tutor** 4/18-6/18

- CSE 15L (Unix Lab), CSE110 (Software Engineering) - Prof. Gary Gillespie
- Mentored students to create full-fledged applications from ideation to delivery. Designed and created labs in various technical topics.

## SELECT PROJECTS

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**PERCEPT / Google Glass (Android, Java), Node.JS, Firebase, Arduino** 4/18-6/18

- Crafted Augmented Reality application via Google Glass to present Emergency Room patient profiles.
- Tracked and displayed realtime patient vital signs through Arduino.
- Designed with respect to real world healthcare systems under guidance of UCSD ER Doctors and Professors

**Song Snip / Python, ffmpeg, Node.JS, Firebase, Tensorflow** 8/17-PRES

- Created web app which allows users to search for music clips to augment online communication.
- Used forced alignment techniques to pattern match between popular music and lyric tracks.
- Explored using Hidden Markov Models and RNNs to improve accuracy.

**Generating Groupchats / Python, Tensorflow** 11/17

- Trained character based LSTM networks and scraped social media data to generate group chats between individuals.
- Optimized batch size, number of layers, etc. Generated seemingly realistic chat history.

**Event Eyes / Node.JS, Microsoft Azure, Android (Java)** 11/15-2/16

- Created Android application that detects important information from event flyers and adds it to your calendar.
- Worked on OCR using the Google Tesseract engine, text parsing using NLP to find key information, and full-stack with native Android.

## ORGANIZATIONS

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**Projects @ UCSD / Founder** 5/17-2/18

- Teamed up with two peers to start project incubator.
- Sourced and mentored projects from local startups and organizations.

**TESC / Prodev Committee** 9/15-4/17

- Organized events which prepared UCSD students for the workforce including DeCAF, UCSD's student run career fair.

## SKILLS & HONORS

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**Languages:** C/C++, SQL, Java, Haskell, Python, PHP

**Data/Networking:** Tensorflow, SciPy, libuv, TCP/IP

**Android:** Unity, Google Glass, Native Dev

**Web:** HTML/CSS/JS, React, ExtJS, Node.JS

**Honors:** SD Hacks Viasat Award '16, 1st Place UCSD Hack Day '16, 9x Provost Honors