

# ROHAN RAVAL

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## EDUCATION

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University of Virginia, B.S. Computer Science and B.A. Physics

Aug 2015 – May 2019

- **Computer Science GPA:** 3.5/4.0, **Honors:** Dean's List
- **Relevant Coursework:** Autonomous Racing, Machine Learning, Algorithms, Comp Architecture, Quantum Computing

## EXPERIENCE

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UVa Link Lab – *Autonomous Vehicles Research*

Feb 2018 – present

- Working on creating virtual testing and prototyping environments for autonomous vehicles using Unity and C#

theCourseForum – *Lead Developer*

Feb 2017 – present

- theCourseForum is an online community with 15,000+ users that helps peers share course experiences at UVA
- Optimized the search and autocomplete functionality, resulting in faster lookup of courses
- Creating a course scheduler using Ruby on Rails, allowing all users to create semester class schedules

Commonwealth Computer Research Inc. (CCRI) – *Software Engineering Intern*

May 2017 – Aug 2017

- *Arpeggio*: Marketing analytics and data harmonization suite – built with Scala and AngularJS
  - Created data filters allowing clients to customize time-series forecasting to gain greater insights into trends
  - Implemented backend caching system to save commonly-queried data and speed up processing by up to 2x
  - Automated ingest of data from provider using Python and Bash scripts, saving 3 hours/week of manual scraping
- *SaniTracker*: Bacterial growth tracking and visualization platform for UVA Hospital – built with Scala and Angular 4
  - Created the entire manual data ingest system, allowing nurses and staff to report and track bacterial measurements

UVa Systems and Information Engineering – *Health Software Research*

Sep 2016 – Apr 2017

- Developed health software that aided in the comparative diagnosis of anxiety disorders and phobias
- Built a web platform to collect spatio-temporal data from study respondents using PHP and JavaScript

## PROJECTS

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**SynopText**: An app that expands internet accessibility by allowing users to consume summarized video content over SMS

- Developed at PennApps; I integrated YouTube search and developed scripts to extract text from YouTube videos
- *Tech Stack*: Node.js, JavaScript; using YouTube, Vonage Nexmo, and Aylien (Natural Language Processing) API's

**Carpool**: a web application to facilitate ridesharing transactions among drivers and passengers

- Calculates gas and maintenance costs for shared trips using location and vehicle data and allows for one-click payments
- *Tech Stack*: Python, Django, and JavaScript; using Google Maps and Venmo API's

**University Analysis**: a data visualization project analyzing factors influencing university performance and rankings

- Presented at an entrepreneurship expo to 50+ attendees; built using Python + numpy, pandas, sk-learn, and scipy libraries

## ACTIVITIES

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Hack UVA – *Executive Board*

Jan 2017 – present

- Helped plan, organize and execute a 200+ person hackathon in March 2017
- Responsible for growth and scaling; helped reach 800+ expected attendees for 2018 by creating new partnerships
- Established connections with corporate sponsors to raise over \$85,000 in funding, and managed corporate mentorship

Mobile App Development Club (Westfield HS) – *President and Co-Founder*

Jan 2013 – Jun 2015

- Built Android projects, e.g. Meme Maker, led teams to competitions, and organized school-wide events to promote CS

## TECHNICAL SKILLS

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**Programming Languages and Tools:** C++, Python, ROS, Java, Scala, JavaScript & TypeScript, Bash scripting, Git

**Web Development Technologies:** Django, Node.js, Angular, RxJS + ngrx, Ruby on Rails, PHP, Docker