

Vansh C Singh

vanshcsingh.github.io • linkedin.com/in/vanshcsingh • github.com/vanshcsingh • 760-435-9447 • vanshchaudhary@gmail.com

Seeking Backend SWE Internship for Summer 2018

EDUCATION

B.S. in Computer Science, *UCSD Jacobs School of Engineering*, 3.9 GPA

September 2015 - June 2019

- Regents Scholar and Provost Honors who loves math
- Member of Graduate CSE Theory Group
- Favorite Classes: Neural Nets, NLP, Discrete Math, Stats, Algorithms, Adv. Data Structures, Lin. Algebra

WORK

Full Stack Software Engineering Intern, *Classy*

June 2017 - September 2017

- Created and integrated the new Search API that allows for even faster queries and fuzzy-search of fundraising-entities over Elasticsearch clusters - currently being used by Data Analytics team
- Contributed React Components to Classy-Components, a library for front-end development used at Classy
- Maintained and updated the primary super-admin internal tool for the customer service department
- Writing grammars, Serverless, Node, React, Angular

Financial Analyst Lead Intern, *Reality Shares*

September 2016 – January 2017

- Created an application that automates the calculation of a predictive market-strength indicator that forecasts long-term market downturns
- Saved 30 man-hours of work per month in a small company of just ~10 full-time employees
- Utilized HighCharts and D3.js to make and maintain data visualization tools on website
- Java, Bloomberg API, D3.js, HighCharts

Tutor for Data Structures and Unix Lab, *UCSD Computer Science & Engineering Department*

June 2016 – Present

- Mentored students in their implementations of Object-Oriented polymorphic containers including Hash Tables, Trees, Linked Lists, and Stacks, in C, C++, and Java
- Taught software engineering tools such as Git, IDEs, Unit testing, Make, Ant
- C, C++, Java, Data Structures, BASH, Git, Make, Ant, Eclipse, GDB, Valgrind, Linux, JUnit

Video Coding Researcher, *UCSD Electrical & Computer Engineering Department*

January 2016 – May 2016

- Made video editing tools using ffmpeg and x264 tools/APIs
- Created video compression algorithms and tools from scratch in C, C++, and Bash
- C++, Bash, Make, x264, ffmpeg

PROJECTS

Development of Hindi and Marathi (NLP research project), *Project Lead*

April - June 2017

- I lead a team of four in researching Hindi and Marathi's similarity to Sanskrit in order to better understand their divergence (<https://github.com/vanshcsingh/indic-lang-development>)
- Analyzed phoneme frequencies to gauge how similar they sound today compared to elder indic languages
- Python, NLTK, Machine Learning

EventLit, *Lead Software Developer*

January - March 2017

- Led the software development efforts in a team of 10 in making an android application where students can centralize their events from school organizations and clubs
- Android, Firebase

EMG Pong Game, *Co - Developer*

January - April 2016

- Created a pong video game remote for the handicapped where the paddle is controlled from forearm flexions
- Application involved low/high pass filtering, signal rectification, power smoothing, calibration
- ISRs, Python, C, Networking, EMG, Numpy, Scipy, Matplotlib, AnyDBM, PySerial, Arduino