

Vansh C Singh

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seeking_internship = "Fall 2018"

EDUCATION

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

September 2015 - June 2019

- Regents Scholar and Provost Honors
- Toastmasters member
- Notable Classes: Neural Nets, NLP, Discrete Math, Probability, Algorithms, Adv. Data Structures, Lin. Algebra

WORK

Microsoft, Incoming SWE Intern

June 2018 - September 2018

- Windows Engagement Department

Classy, Full Stack SWE Intern

June 2017 - September 2017

- Designed a custom language and compiler that compiles into Elasticsearch Query DSL
 - While saving advanced functionality such as aggregations, and boolean expressions, compressed DSL queries by as much as 80%
- Created REST API to overlay over our Elasticsearch clusters using my SimpleSearch API interface
- 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
- Compilers, REST, Serverless, Node, Express, React, Angular

Reality Shares, Financial Analyst Intern

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
- Made and maintained data visualization tools on website
- Java, Bloomberg API, HighCharts

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

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, BASH, GDB, Valgrind, Linux

UCSD Electrical & Computer Engineering Department, Video Coding Researcher

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