# **Cody Hankins**

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# Education

### STANFORD UNIVERSITY

B.S. IN COMPUTER SCIENCE 3.75 GPA | expected June 2019

### Skills

C (fluent) • C++, HTML5, CSS, Javascript (experienced) • Java, Python, Cypher (exposure)

### Relevant Coursework

Principles of Computer Systems
Computer Organization & Systems
Math Foundations for Computing
Probability for Computer Scientists
Colloquium on Computer Systems
Programming Abstractions
Programming Methodology

# **Upcoming Roles:**

Resident Computing Consultant

- teach a class on computer literacy
- provide support and advice to first-years navigating Stanford's computing network
- provide general support as a member of Cedro dorm staff

#### Ski Dock Instructor, SSC 2017

- teach guests of Stanford Sierra
   Camp how to ski and wakeboard
- maintain and operate the speedboats safely
- serve in a lifequard role

Find me on my personal site, LinkedIn, GitHub, HackerNews, or Product Hunt: @chankins / @chankinsoft

## Experience

### **KPIT Technologies** | International Software

Development Intern | July 2016 - Aug 2016 in Pune, India

- Created an interactive d3.js backed webapp in Javascript to visualize a Neo4j graph database containing ~50K nodes, now used in Chrysler's R&D division to manage enterprise hardware testing data
- implemented a ~1K line data-parsing script in Python + Trifacta to transform ~200K data points into a uniform, useable format to eventually become Neo4j nodes

# @chankinsoft | Freelance Web Developer |

February 2016 - Present in Stanford, CA

- develop websites using a variety of frameworks requested by the organization: HTML5up, Wix, Magixjs
- do contracting work extending sites for native mobile support, with codebases of ~10K+ lines
- some I've worked on: rcgia.com, tbexcon.com

# **Projects**

### Heap Allocator

- created an alternative implementation of the memory manager in C using an implicit sorted linked list
- doubled initial efficiency by adding constant-time coalescing, tuning complier optimization, and making the free list insertion run in amortized constant time
- raised performance to 91% of stdlib version with respect to throughput and memory utilization

#### Standard Shell

 implemented a fully-functioning shell in C, with support for multiprocess piping, back/foreground jobs, and a variety of standard shell operations

#### RSS News Aggregator

- created a web crawler that aggregates RSS feeds from hundreds of sites and indexes each by keyword in a map
- implementing multithreading caused 20x speedup

#### **Proxy Server**

- wrote a web server in C++ that supports HTTP request forwarding, chaining, blacklisting, and encryption
- multithreaded to efficiently process loads of dozens of requests a second

# **Activities**

### Stanford Outdoor House | CS Manager | 2016 - 2017

- Manage a founding budget of \$1.5K for complete renovations of common grounds and halls
- crowdsourced and implemented landscaping improvements, built most by hand
- transformed house branding through a standardized banner/crest, raised hundreds in capital for future work