Arvind **Raghavan**

Software Developer

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github.com/raghavan-arvind
in/arvind-raghavan-ut

Education

University of Texas at Austin Graduating December 2020
BS in C.S. Honors - *Turing Scholar*
Major GPA: *3.95*, Overall GPA: *3.89*

Experience

Robinhood **Software Development Intern**, Summer 2020
Menlo Park, CA

- **Architected and successfully completed a zero-downtime migration** of Robinhood's dynamic configuration service, including a zero-downtime database migration, migrating REST APIs with intermediate states, implementing token-based authentication, and backporting existing permissions, all while maintaining a seamless experience for the end-user.
- **Designed and implemented namespace-level permissions** for Robinhood's dynamic configuration service, involving coordinating with around a dozen teams to ensure that there was no downtime for making changes to essential configuration values such as killswitches.

Jane Street **Software Development Intern**, Summer 2019
New York City, NY

- **Built distributed DHCP server from scratch** in OCaml to support online configuration changes and synchronization across locations around the world.
- **Enabled 10x speedup in stock monitoring service** by profiling and eliminating bottlenecks. Also split all non-essential work into a separate process that can be killed during heavy workloads.

Zilliant, Inc. **Software Development Intern**, Summer 2018
Austin, TX
Developed an end-to-end solution to integrate Scikit-learn algorithms into Data Science platform.

Advanced Research Laboratories **Intern**, Summer 2017
Austin, TX
Developed Python test framework to analyze satellite positioning tools and won first place award among interns at cumulative presentation.

About

I am passionate about building fast, reliable and scalable applications. I love learning new systems and technologies and finding ways to make things better. I currently live in Austin, TX but am willing to relocate!

Languages Used

Python • Java • Bash • C • C++
Go • Javascript • Docker • SQL
Postgres • AWS • OCaml • React
HTML • CSS

Relevant Courses

(h) = Honors, (g) = Graduate

Data Structures (h)
Computer Architecture (h)
Operating Systems (h)
Algorithms and Complexity (h)
Network Security (h)
Concurrency (h)
Prediction Mechanisms in Computer Architecture (g)

Honors

National Merit Scholar
Valedictorian
U.S. Presidential Scholar Candidate
National AP Scholar

Research

CrashMonkey *Professor Vijay Chidambaram*, Fall 2019 - current

- Programmatically generated crash consistency tests for `xfstests`, the Linux filesystem test suite. Currently working with Linux developers to patch nine tests to master.
- Built a fuzzer to search for crash consistency bugs. Reported strange behavior to Linux developers.

Neural Network Prefetcher *Professor Calvin Lin*, Spring 2018
Trained LSTM neural networks on complex memory access patterns in order to assess the potential of putting in a trained machine learning model into a hardware prefetcher.