Nicolas Chan

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> Deep thinker and prolific coder building reliable systems at scale.

Education

University of California, Berkeley

- B.A. Computer Science & Mathematics *with high distinction* (3.965 GPA)
- Electrical Engineering and Computer Sciences Honors Program
- *Selected Courses:* Data Structures (A), Machine Structures (A+), Computer Security (A), Computation and Complexity (A), Discrete Math & Probability (A), Math Logic (A), Numerical Analysis (A+)

Experience

Microsoft — Software Engineer 2

> Summer 2020 (Internship), July 2021 – Present (Full Time)

- Improving the Viva Engage core backend messaging services (Java/Ruby) to perform reliably at scale.
- Building new backend features end-to-end, participating in on-call rotation, and mentoring colleagues.
- Contributed to the “Critical Initiative Tiger Team,” rapidly adapting to high-priority projects across teams, accelerating development of new feature foundations.

Berkeley Research Computing at UC Berkeley — Operations Intern

> September 2017 – May 2021

- Assisted researchers using the supercomputer: installing software, consulting, and debugging.
- Developed Rust plugins for managing resource quotas and performed other sysadmin tasks.
- Published and presented work on cluster usage analysis at the PEARC19 conference.

Stinger Ghaffarian Technologies, Inc. — NASA Ames Airborne Science Mission Intern

> Summer 2018

- Developed an IRC chat bot to provide access to data on bandwidth-constrained airborne science missions.
- Added new data sources to the Mission Tools Suite Java Tomcat service, fixed bugs, optimized Postgres database queries, and improved the Jenkins build system (using Docker).

Projects

- Nicolas Chan. 2019. A Resource Utilization Analytics Platform Using Grafana and Telegraf for the Savio Supercluster. In Proceedings of the Practice and Experience in Advanced Research Computing on Rise of the Machines (learning) (PEARC '19). ACM, New York, NY, USA, Article 31, 6 pages. DOI: https://dl.acm.org/doi/10.1145/3332186.3333053
- **Supervised Independent Study** Investigating grammars for syntax-guided program synthesis. Presented at SYNT 2020 workshop: https://arxiv.org/abs/2007.06677
- **bell.plus** (https://github.com/nicolaschan/bell) Lead developer. Bell countdown website for high schools, received thousands of hits on a typical school day.