

Danny Cho

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Education

Bachelor of Science in Computer Science Honors, UC Santa Barbara, GPA: **3.98/4.0** Sept 2016 - June 2019

Work Experience

UCSB Distributed Systems Lab, Research Assistant Nov 2018 - Present

- Architected and developed a Byzantine Atomic Commitment protocol based using C++ and Python.

TrueVision 3D Surgical Systems, Software Engineer Intern Jan 2019 – Mar 2019

- Built a detection and alerting system for high gain on the surgical camera using C++.

Facebook, Software Engineer Intern June 2018 – Sept 2018

- Backend development using Hack in the Product Security Program Analysis team.
- Built a feature on Invariant Detector that detects privacy bugs through edge mutations on the Ent layer.
- Used Hive, XDB, and Dataswarm to build a pipeline that learns invariants from edge mutations.
- Optimized rate limiting by implementing a cache layer which led to a 67% decrease in gCPU usage.
- Implemented whitelisting for incorrect rulesets learned through IVD by using Thrift and Configurator.

UCSB Search Lab, Research Assistant and Developer Dec 2017 – May 2018

- Developed and analyzed a search rank score prediction program using Indri (C++) and RankLib (Java).
- Refactored a two-phase search algorithm using C++, Bash Scripting, Python, and Java.

AppFolio, Software Engineer Intern June 2017 – Sept 2017

- Full stack agile TDD software development with daily release cycles using Ruby on Rails and MySQL.
- Rearchitected the late fees assessment flow and algorithm to accurately handle backdated transactions.
- Refactored Reporting Framework DSL to alleviate start up time in creating a new report conversion.

Smart RG, Software Engineer Intern Nov 2016 – April 2017

- Wrote bash scripts to automate feature development and implemented language localization.
- Created a customizable theme interface, improved UI, and debugged the Smart OS GUI.

Projects

SB Hacks (www.sbhacks.com), Director/President and Developer Oct 2016 – Mar 2019

- Led a team of 20 to raise \$150,000 and organize SB Hacks, which annually hosts 500 students.

express-form-post (www.npmjs.com/package/express-form-post) May 2017 – Sept 2017

- Node.js module that handles validating request bodies before uploading to Disk or Cloud storage.

Invidia Best Continuation Hack at Cal Hacks 4.0 July 2017 – Oct 2017

- A search engine that allows you to search videos by content as opposed to searching by metadata.

Skills

Programming Languages: C++, C, JavaScript, Python, Java, PHP, Hack, Scala

Web Technologies: Node.js, Ruby on Rails, Laravel, MongoDB, MySQL, PostgreSQL, React.js, HTML, CSS

Other: Git, Unix, Bash, Heroku, Electron, AWS, Cilk++, MPI