DANIEL GIRSHOVICH

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EDUCATION

Cornell University — August 2010 - May 2014
B.S. Engineering Physics — *Ithaca, NY*

WORK EXPERIENCE

Quantum Biology Startup — June 2019 - February 2020
Independent Researcher — *Santa Barbara, CA*

- Researched applications of quantum effects in biological systems.

Rigetti Computing — January 2017 - November 2019
Computational Modeling and Simulation — *Berkeley, CA*

- Built internal modeling and simulation tools for the design of superconducting quantum processors (QPUs)
- Worked with experimental physicists to automate the calibration and measurement of prototype QPUs
- Built deployment infrastructure for Rigetti's Quantum Cloud Services and internal services

KittyHawk / Zee.Aero — July 2014 - November 2016
Avionics Software Engineer — *Mountain View, CA*

- Iterated on avionics software for several prototype manned electric aircraft
- Helped build an automated hardware-in-the-loop test for the full avionics suite
- Built internal tools for tracking flight binaries, interfacing with embedded bootloaders, and mapping test results to low-level requirements

Space Exploration Technologies Corp. (SpaceX) — June 2013 - August 2013
Avionics Test Software Intern — *Hawthorne, CA*

- Automated hardware acceptance testing by building a custom GUI and domain-specific language

KPCB Engineering Fellow @ Crittercism Inc. — June 2012 - August 2012
Backend Software Intern — *San Francisco, CA*

PROJECTS

Violet Satellite Project (UNP-6) — September 2010 - May 2014
Program Manager (September 2012 - December 2013) — *Ithaca, NY*

- Led a team of 70 Cornell students in building a nanosat for the Air Force Research Lab
- Responsible for coordinating all subsystems, including: flight software, attitude control, radio communications, mission operations, power, harness, and payload (novel control moment gyroscopes + associated algorithms)

Personal / Other

- Auto: A Haskell tool for defining and spoofing test message sequences in NASA's cFE
- Numerical Methods: C++ implementations of computational physics problems, including the orbital mechanics, quantum wavefunction evolution, and electrostatic potentials in complex geometries
- Genetic Programming: A Haskell library for experimenting with generic genetic programming
- Personal Computing Environment: A lisp-based interface to GNU/Linux for effective computing.

DIGITAL TOOLBOX

Emacs/Elisp · Julia · Haskell · C · Common Lisp · Python · Bash · OCaml
GNU/Linux · Nix · Git · Jupyter · Docker · Singularity · Terraform