

# DANIEL GIRSHOVICH

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## EDUCATION

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Cornell University - B.S. in Engineering Physics

May 2014

## WORK EXPERIENCE

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**Quantum Biology Startup**

*Independent Researcher*

June 2019 - February 2020

*Santa Barbara, CA*

- Researched applications of quantum effects in biological systems.

**Rigetti Computing**

*Computational Modeling and Simulation*

January 2017 - November 2019

*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 (QCS) and internal services

**KittyHawk / Zee.Aero**

*Avionics Software Engineer*

July 2014 - November 2016

*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)**

*Avionics Test Software Intern*

June 2013 - August 2013

*Hawthorne, CA*

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

**KPCB Engineering Fellow @ Crittercism Inc.**

*Backend Software Intern*

June 2012 - August 2012

*San Francisco, CA*

## PROJECTS

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**Violet Satellite Project (UNP-6)**

*Program Manager (September 2012 - December 2013)*

September 2010 - May 2014

*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](#)
- [Personal Computing Environment](#): A lisp-based interface to GNU/Linux for effective computing.
- [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

## DIGITAL TOOLBOX

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Julia · Python · Haskell · C · Common Lisp · Bash · OCaml

Emacs/Elisp · GNU/Linux · Nix · Git · Jupyter · Docker · Singularity · Terraform · AWS · Rescale