DANIEL GIRSHOVICH

1-201-745-3532 ⋄ dan.girsh@gmail.com ⋄ dangirsh.org

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

· Personal Computing Environment: A literate, reproducible, and effective computing environment
· 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

DIGITAL TOOLBOX

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