Matt Huszagh

github.com/matthuszagh linkedin.com/in/matthuszagh matthuszagh.com

Work

Quartiq (Berlin) — Electrical Engineering/Programming
San Francisco (Remote, Contract) | October 2020 — Present

- Writing firmware in Rust for DSP-based lock-in amplifier
- Targeting an STM32H7 (Arm Cortex-M7) microcontroller
- Code is open source and viewable on GitHub (quartiq/stabilizer)

 $\begin{tabular}{ll} \textbf{Independent Research} &-- \textit{Electrical Engineering/Programming} \\ \textbf{NYC and San Francisco} & | \textit{May 2018} &-- \textit{October 2020} \\ \end{tabular}$

- Designed, built and programmed a 6 GHz frequency-modulated continuous-wave (FMCW) radar
- Wrote FPGA code to perform real time signal processing
- Wrote multithreaded C code to interface radar with PC
- Designed and built custom radio frequency PCB
- Designed and simulated microwave structures using open-source electromagnetic wave simulator, OpenEMS
- 3D printed horn antennas and radar mount

JP Morgan — Emerging Markets Trading Analyst New York, NY | January 2016 — May 2018

- Co-managed a \$65 M portfolio in emerging markets
- Traded highly volatile and complex interest rate derivative
- Advised portfolio managers at major global hedge funds

 ${f CERN}-{\it Research\ Assistant}$

Geneva, Switzerland | January 2014 — June 2014

- Worked on high-energy particle physics experiment investigating rare kaon decay
- Wrote C++ code to extract relevant particle decay data
- Wrote C++ code to adjust baseline signal level in real time to prevent signal clipping

Education

Georgetown University — BSc

Washington, D.C. | August 2011 — December 2015

- Majors: Physics & Economics

- Cumulative GPA: 3.7/4.0 (Cum Laude)

- Physics GPA: 3.9/4.0

- ACT: 35/36

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Skills

Programming:

C, Verilog, Rust, Python, Elisp (some C++, Bash, Nix)

Software:

Linux, Git, LaTeX, KiCAD, Vivado, OpenEMS, Ngspice, Yosys, Nix

Open Source:

quartiq/stabilizer, Emacs orgmode, KiCAD libraries, Nixpkgs, pyems (maintainer)

Languages:

English (native), French (conversant)

Awards + Achievements

Graduated Cum Laude from Georgetown University

Ranked Top 5 of JP Morgan's firstyear analysts, 2016

JP Morgan 'Exceeds Expectations' (top 10%) recognition every year

Relevant Coursework

Electrodynamics Quantum Mechanics Classical Mechanics Statistical Mechanics Computer Science I (C++)