Hugues Bruant

github.com/huguesb

San Francisco, CA
hugues.bruant@gmail.com
+1 650 307 8917

Work Experience

Staff Software Engineer — **Affirm** — San Francisco, CA — December 2018 – May 2023
Led critical Python 2 to 3 migration for ML Platform (model training & serving infrastructure).
Designed inference infrastructure to scale to more ML models, deployed more frequently.
Delivered major reliability and scalability improvements to CI for both testing and deploys.
Delivered dramatic speedups to internal dev tooling, and major improvements to typing coverage and quality.

Principal Software Engineer — **AeroFS** — Palo Alto, CA — June 2016 – August 2018
Orchestrated a complete re-architecting of the Amium product from private cloud to SaaS.

Senior Software Architect — **AeroFS** — Toronto, ON, Canada — November 2014 – May 2016
Led a major overhaul of the core distributed file synchronization algorithm.
Delivered significant scalability improvements across the entire product.

Software Engineer — **AeroFS** — Palo Alto, CA — July 2012 – October 2014
Delivered major scalability and UX improvements to the AeroFS desktop client.
Designed and implemented the RESTful Content API and related proxy/tunnel protocol.

Software Engineer Intern — **ARM** — Cambridge, UK — June 2011 – October 2011
Optimized important plugins through multithreading and wait-free queues.

Software Engineer Intern — **Google** — Zurich, Switzerland — June 2010 – August 2010
Rewrote the sitemaps fetch scheduler for better scaling. Peer bonus for “awesome work on sitemaps”.

Education

Carnegie Mellon University — Pittsburgh, PA, USA — Spring 2012
Exchange semester in the Computer Science department.

Ensimag, Grenoble Institute of Technology — Grenoble, France — 2009 – 2013
MS in Computer Science and Applied Mathematics.

Notable Open Source Projects and Contributions

prunepytest – *personal* – Python, Rust, pytest — 2024
Optimize tests by picking a minimal safe set of tests to run for a given change.

mypy – Python — 2020 – 2022
Multiple significant performance improvements upstreamed into mypy.

golang – Go — 2017
Multiple performance improvements upstreamed into Go runtime and compiler.

SSMP – *AeroFS* – RFC, Go, Java — 2015
Design, specification, and reference implementation of a simple messaging protocol.

gockerize – *AeroFS* – Go, docker, bash — 2015
CLI tool to easily package Go app into a single-binary docker imager.

XOS – *personal* – z80 assembly — 2009 – 2010
Operating System for TI-83+/84+ graphing calculators.

Edyuk – *personal* – C++, Qt4 — 2006 – 2009
IDE targeted at C++/Qt4 projects, with extremely fast and accurate code completion.