

Matt Iselin

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Experience

Linux and Windows Systems Administrator (Until May 2015) Site Reliability Engineer (Since May 2015)

Google, LLC

March 2014 to Present

Sydney, Australia & Sunnyvale, CA

Corporate Engineering SRE (March 2014 – July 2018)

Operations Participating in an oncall rotation supporting a fleet of 1,800 servers across Windows and RedHat/Oracle Enterprise Linux 5, 6, and 7.

Software Engineering Developed a critical system used across the organisation to maintain configuration data. Ported a complex, proprietary, C++ software system to run on non-proprietary environments such as RHEL and macOS.

Mentoring and Technical Leadership Provided mentoring for new engineers and acted as a primary contact point for advice and consulting for several key internal technologies in the Corporate Engineering department.

Gmail SRE (July 2018 – Present)

Operations Participating in an oncall rotation supporting the full-stack Gmail product including storage, mail delivery infrastructure (SMTP), and backend/frontend systems (Web, Mobile, IMAP, POP, etc).

Software Engineering Ran a complex migration across Gmail's codebase (including some code from 12+ years ago) from Python 2 to Python 3, as part of a company-wide mandate.

Python Developer

Netbox Blue

November 2012 to March 2014

Brisbane, Australia

Software Engineering Spearheaded the porting of a heavily Windows-oriented C++ software application, used to intercept and redirect low-level network traffic, to Mac OS X (10.6+). This involved implementing a Windows compatibility layer and working with high thread counts in an extremely concurrent application.

Software Solutions Implementation of various features from the conception of an idea to a working unit tested and sellable feature, such as the groundwork for a next-generation firewall product in Python and C++.

Improvements Resolving bugs and implementation of new features in the company product suite, as well as continued long-term maintenance of these features.

Projects

The Pedigree Operating System (C++), github.com/miselin/pedigree, including:

- A testsuite with micro-benchmarks to aid in optimization of kernel features
- Development of kernel utilities including STL-like classes where STL is unavailable
- A full TCP/IP stack including IPv6 capability

A Discord bot with commands for a small Discord community (Java), github.com/miselin/xmppbot

An unpublished 3D graphics engine (video demo - https://youtu.be/vs_6_t7iwHg)

Coding & infrastructure to integrate tech and my home (<https://mattiselin.com/2020/12/16/a-smarter-home/>)

Education

University of Southern Queensland (Queensland, Australia)

Bachelor of Information Technology (major Applied Computer Science), November 2012