MATTHEW GRUEN

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Education

- **Stony Brook University** at Stony Brook, New York
  Master of Science in Computer Science — Graduated May 2013
  GPA: 4.00
  Bachelor of Science in Computer Science — Graduated May 2012
  - Enrolled in Computer Science Honors program — GPA: 3.82

Professional experience

- **Google** (Mountain View, CA) — July 2013–Present
  - Software engineer primarily focused on onboarding experience for Apps for Work, including work on frontend, backend, and operational systems
  - Highly proficient in internal Google tooling for building state-of-the-art services and websites
  - Regularly design and drive projects and features, scoping tasks for other engineers
- **Student projects** (Stony Brook, NY) — Spring 2012–Spring 2013
  - Wrote a precise garbage collector for C using a typed-based source transformation framework, adding support for runtime introspection with libunwind and DWARF and working across shared libraries
  - Ported Tiny C Compiler to be self-hosting in a 64-bit toy OS, writing an ELF-parsing dynamic loader
  - Detected sensor node faults in the Intel-Berkeley dataset using statistical estimation and classifiers
- **Google** (New York, NY) — Summer 2012
  - As intern, added support for collaborator cursors in Google Slides editor
- **Riverbed Technology** (San Francisco, CA) — Summer 2011
  - As intern, created a tool to convert interprocess traffic into fabricated TCP/IP capture for debugging and profiling in Wireshark, helping to identify performance bottlenecks like livelock and chatty processes
- **Galaxy cluster administrator** (Stony Brook, NY) — Fall 2010–Spring 2012
  - Managed the Galaxy and Seawulf high performance Beowulf clusters for the AMS department
- **Google Summer of Code: Haskell** — Summer 2010
  - Designed a RESTful backend for Hackage, a repository of over 5,500 Haskell packages
  - Gave a talk, "Hackage 2.0: Serving Packages Better", at the Haskell Implementors' Workshop in Baltimore, Maryland at the 2010 International Conference of Functional Programming

Technical skills

- Computer languages: Java, JavaScript, Python, C, C++, Haskell, Scala, Bash; familiar with many others
- Toolchain: GCC suite and GDB, Chrome debugger, Closure compiler, make, Vim, Git
- Other areas of interest: Machine learning, Concurrency, Compilers and type theory, Network security

Leadership

- Google — 2013–Present
  - Hosted an intern in Summer 2015 and have mentored Nooglers
  - Have given many tech talks, including a widely-referred-to synopsis of JavaScript frameworks
- Teaching Assistant at Stony Brook University — Spring 2012
  - Held office hours for undergraduate software engineering and game programming courses
- Member of Stony Brook Computing Society (SBCS), an ACM chapter — 2009–2012
  - Led review sessions for 200-level undergraduate classes, preparing students for exams
- Member and president of Linux Users Group at Stony Brook (LUGSB) — 2009–2012
  - Regularly hosted meetings and gave technical presentations