Remy Goldschmidt

Education

2014 – 2018   **Bachelor of Science in Computer Science**, *University of Illinois at Urbana-Champaign*.
Thesis: A Generic, Anytime Equality Saturation Algorithm

Work Experience

July 2019 – present   **Software Engineer**, *Google Research*.
- Working on a compiler written in `Haskell`.

August 2018 – July 2019   **Software Engineer**, *DFINITY*.
- Worked on the gossip and DHT protocol for a peer-to-peer decentralized network using `Haskell`.

Summer 2017   **Software Engineering Intern**, *Awake Networks*.
- Worked on incrementalizing a `Nix`-based build system using `Haskell`.
- ⦾ | `Haskell` | ➕ 34169 | ➖ 21207

Summer 2016   **Software Engineering Intern**, *Uber Advanced Technologies Center*.
- Worked on infrastructure software for autonomous vehicles in `C++`.

Summer 2015   **Research Intern**, *UIUC Formal Systems Laboratory*.
- Worked on software for executable semantics using rewriting logic.
- ⦾ | `Java` | ➕ 19062 | ➖ 15342

2013 – 2014   **Research Intern**, *Columbia University Applied Physics / Applied Math Department*.
- Designed and built a sealed standing-wave thermoacoustic refrigerator.
- ⦾ | `Haskell` | ➕ 4850 | ➖ 2718

Activities

2014 – 2017   **Club**, *University of Illinois ACM SIGPLAN*, Founder and chair.
Group for discussion of programming language theory and related subjects.

2011 – present   **Hobby**, *Open Source Programming*.

	language-ninja	`Haskell`	⦾ 277	➕ 34169	➖ 21207
⑂	k	`Java`	⦾ 185	➕ 19062	➖ 15342
	ghcjs-electron	`Haskell`	⦾ 66	➕ 4697	➖ 758
	ThermoCalc	`Haskell`	⦾ 59	➕ 4850	➖ 2718
	pianoman	`C++`	⦾ 56	➕ 11671	➖ 4765
	xprintidle-ng	`C`	⦾ 44	➕ 4308	➖ 12428
	icfp-2015	`Haskell`	⦾ 36	➕ 1381	➖ 1220
⑂	nixpkgs	`Nix`	⦾ 31	➕ 568	➖ 36

2014 – present   **Hobby**, *NixOS package maintainer*.
Maintainer for g-wrap, guile-gnome, pdf2htmlEX, and souper.

Skills

Programming   `Haskell` (8 yrs), `Nix` (4 yrs), `Agda`, `Rust`, `C`, `C++`, `Java`, `OCaml`, `Python`
Software   Linux (10 yrs), NixOS, git, LaTeX, ROOT, Geant4
CAD   SolidWorks, Siemens NX, EAGLE, Cura

Technical Education

Courses taken
(⋆ means proficiency test / AP exam / . . .)

AE 100	Introduction to Aerospace Engineering
AE 199	Aerospace Computer-Aided Design
AE 202	Aerospace Flight Mechanics
AE 311	Incompressible Flow
AE 352	Aerospace Dynamical Systems
CHEM 102 / CHEM 104	General Chemistry I/II ⋆
CS 125	Introduction to CS ⋆
CS 173	Discrete Mathematics
CS 225	Data Structures ⋆
CS 233	Computer Architecture
CS 241	System Programming
CS 242	Programming Studio
CS 357	Numerical Methods
CS 374	Algorithms & Models of Computation
CS 397	Individual Study — Category Theory
CS 421	Programming Languages
CS 422	Programming Language Design
CS 440	Artificial Intelligence
CS 476	Program Verification
CS 477	Formal Software Development Methods
CS 491	Functional Programming Seminar
CS 497	CS Team Project
CS 498-MP3	Logic in Computer Science
CS 499	Senior Thesis
CS 524	Concurrent Programming Languages
ECE 205 / ECE 206	Electronic Circuits + Lab
ECON 102	Microeconomic Principles
MATH 220 / MATH 231	Calculus I/II ⋆
MATH 241	Multivariable Calculus
MATH 415	Linear Algebra ⋆
ME 300	Thermodynamics
MSE 280	Engineering Materials
PHYS 211 / PHYS 212	Physics: Mechanics / E&M ⋆
STAT 100 / STAT 200 / STAT 400	Statistics I/II/III ⋆
TAM 210/TAM 212	Statics / Dynamics