

Remy Goldschmidt




Education

2014–2018 **Bachelor of Science in Aerospace Engineering**, *University of Illinois at Urbana-Champaign*.
Majoring in aerospace engineering, minoring in computer science

Work Experience




2015– **Research Intern**, *UIUC Formal Systems Laboratory*.

Reference: [Dr. Grigore Rosu](#)

- Worked on software for executable semantics using rewrite logic
- Wrote Java to generate OCaml interpreters from semantic specifications
-  | [Java](#) |  19062 |  15342

2013–2014 **Research Intern**, *Columbia University Applied Physics / Applied Math Department*.

Reference: [Dr. I. C. Noyan](#)





















- Designed and built a sealed standing-wave thermoacoustic refrigerator
- Studied the effect of waveform input on efficiency in thermoacoustics
-  | [Haskell](#) |  4850 |  2718

Activities

2014– **Club**, *University of Illinois ACM SIGPLAN*, Founder and chair.

Group for discussion of programming language theory and related subjects

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

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|---|-------------------------------|---------|---|---|---|
|  | k | Java |  185 |  19062 |  15342 |
| | ThomasEngine | Racket |  60 |  4142 |  2023 |
| | ThermoCalc | Haskell |  59 |  4850 |  2718 |
| | xprintidle-ng | C |  44 |  4308 |  12428 |
| | icfp-2015 | Haskell |  36 |  1381 |  1220 |
|  | nixpkgs | Nix |  31 |  568 |  36 |

2014– **Hobby**, *NixOS package maintainer*.

Maintainer for [kframework](#), [g-wrap](#), and [guile-gnome](#)

2008–2011 **Hobby**, *Model Rocketry*.

- Constructed three high-power model rockets using composite materials
- Designed GPS-logging avionics for these rockets

Skills

Languages English (native), Latin (5 yrs)

Programming Haskell (5 yrs), Java, C/C++, Clojure, Racket, OCaml, Python, MATLAB, Mathematica

Software Linux (9 yrs), git, GNU toolchain, ROOT, Geant4

CAD SolidWorks, Siemens NX, EAGLE

Other Emacs, \LaTeX , NixOS

Education

Courses taken

| | |
|------------------|---------------------------------------|
| AE 100 | Introduction to Aerospace Engineering |
| AE 199 | Aerospace Computer-Aided Design |
| AE 202 | Aerospace Flight Mechanics |
| CS 125 | Introduction to Computer Science |
| CS 422 | Programming Language Design |
| ECE 205/206 | Electronic Circuits + Lab |
| MATH 221/231/241 | Calculus I/II/III |
| MATH 225 | Introductory Matrix Theory |
| ME 300 | Thermodynamics |
| MSE 280 | Engineering Materials |
| PHYS 211/212 | Physics: Mechanics / E&M |
| STAT 100/200 | Statistics I/II |
| TAM 210 | Introduction to Statics |
| TAM 212 | Introduction to Dynamics |

Fall 2015 courses

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|--------|-----------------------------------|
| AE 311 | Incompressible Flow |
| AE 321 | Mechanics of Aerospace Structures |
| AE 352 | Aerospace Dynamical Systems |
| IE 300 | Analysis of Data |

Other Courses

Columbia Science Honors Program

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|---|--------|------|
| Relativity and Quantum Mechanics | Fall | 2012 |
| Computer Programming in Java | Spring | 2012 |
| Mathematical Methods in the Physical Sciences | Spring | 2013 |
| Astronomy and Astrophysics | Fall | 2013 |
| Group Theory | Spring | 2014 |