

# 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




2015–2016 **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 |  4674 |  2548

## 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*.

|   |                               |         |   |   |   |
|---|-------------------------------|---------|---|---|---|
|  | <a href="#">k</a>             | Java    |  185 |  19062 |  15342 |
|   | <a href="#">ThomasEngine</a>  | Racket  |  60  |  4142  |  2023  |
|   | <a href="#">ThermoCalc</a>    | Haskell |  59  |  4850  |  2718  |
|   | <a href="#">xprintidle-ng</a> | C       |  44  |  4308  |  12428 |
|   | <a href="#">icfp-2015</a>     | Haskell |  36  |  1381  |  1220  |
|  | <a href="#">nixpkgs</a>       | 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, Clojure, Python, OCaml, MATLAB  
Software Linux (9 yrs), git, ROOT  
CAD SolidWorks, Siemens NX, EAGLE  
Other Emacs,  $\text{\LaTeX}$ , 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

|        |                                   |
|--------|-----------------------------------|
| 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

|   |        |      |
|---|--------|------|
| 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 |