# 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
- o 🚺 | Java | 🗘 19062 | 🖨 15342
- 2013-2014 Research Intern, Columbia University Applied Physics / Applied Math Department.

Reference: Dr. I. C. Noyan

- o Designed and built a sealed standing-wave thermoacoustic refrigerator
- o Studied the effect of waveform input on efficiency in thermoacoustics
- o 🚺 | 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.

_r	k	Java	<b></b> 185	<b>1</b> 9062	<b>1</b> 5342
	ThomasEngine	Racket	<b>-o-</b> 60	<b>4142</b>	<b>2</b> 023
	ThermoCalc	Haskell	<b>-o-</b> 59	<b>4850</b>	<b>2718</b>
	xprintidle-ng	C	<b>-o-</b> 44	<b>4308</b>	<b>12428</b>
	icfp-2015	Haskell	<b>-o-</b> 36	<b>1</b> 381	<b>1220</b>
'n	nixpkgs	Nix	<b>-&gt;</b> 31	<b>5</b> 68	<b>3</b> 6

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

Maintainer for kframework, g-wrap, and guile-gnome

2008–2011 Hobby, Model Rocketry.

- o Constructed three high-power model rockets using composite materials
- o 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

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