

# Sam Boosalis

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Providence, Rhode Island, USA  
Graduation Date: June 2013

## EDUCATION

**Brown University**  
**B. A. Computer Science**

## ADVANCED COURSES

*Compiler Independent Study*  
*Programming Languages*  
*Computational Linguistics*  
*Computer Systems Security*  
*Computer Vision*  
*Machine Learning*  
*Graduate Machine Learning*

## PROJECTS

### Compiler

Wrote a compiler in Haskell from an ML subset to MIPS assembly.

- Strongly, statically typed source language.
- Supports both functional and imperative programming.
- Features lists, records, recursive types, and recursive functions.

### Domain Specific Language

Wrote a logic-programming DSL in Racket

- with Prolog-style backtracking and logic variables
- using LISP macros and continuations

*/etc*

- Interpreter, Type Inference, Garbage Collector
- French-English Translation, Part of Speech Tagging, Pronoun Resolution
- Hybrid Images, Boundary Detection, Scene Classification, Face Detection
- Expectation Maximization, Markov Chain Monte Carlo, Hidden Markov Model, Gibbs Sampling

## WORK EXPERIENCE

### Bootstrap

January 2010 — May 2010

Taught functional programming to middle school students.

### Developer at hearo.fm

November 2011 — March 2011

Implemented instant search / infinite scrolling at hearo.fm, a social network with music distribution.

### Lead Engineer at hearo.fm

March 2011 — Now

Orchestrated public alpha launch. Instituted build process, analytics, and selenium testing. Managed server configuration and scaling. Involved in many design decisions at the heart of hearo (researching and convincing).

### Software Development Engineer Intern at Microsoft Bing

May 2011 — August 2011

Modeled, designed, implemented, tested, evaluated, and maintained Smart Politeness, which updates how much bing crawls a host as a function of blockrate (from manually and biweekly to automatically and daily). Worked with terabytes of data and realtime production code. Resulted in many millions more successful downloads for bing, every day.

## LANGUAGES

### Fluent in

Haskell, Python, LISP, Java, Greek, Spanish, French.

### Familiar with

MATLAB, Javascript, JQuery, Django, C++, C#, Scope, Ruby, Rails, HTML, CSS, SQL, Prolog, L<sup>A</sup>T<sub>E</sub>X, bash, MIPS, Italian, German, Russian.