

LEAH HANSON

leah.a.hanson@gmail.com • blog.leahhanson.us • github.com/astrieanna

TECHNICAL EXPERIENCE

Participant, Recurse Center	New York City	Aug 2016 – Nov 2016
Participated in a 12 week self-directed programming workshop		
Solved Project Rosalind problems		Go
Explored details of the Haiku operating system		C++
Paired on optimizing the performance of a Go game implementation		Python
Paired on understanding and parsing bplists		C
Implemented the Raft consensus algorithm		Julia
Worked through parts of a Statics and a Linear Algebra textbook		Math
And 2 more weeks to go!		
Software Engineer, Stripe	Redmond, WA (remote)	July 2014 – July 2015
Refactored and updated legacy deployment infrastructure		Ruby
Wrote indexers for internal documentation search		Elastic Search, Ruby
Software Engineer, Google	Madison, WI	Feb 2014 – Feb 2015
Made networks go fast		C++
Research Assistant, Julia Language Project	MIT	May 2013 – Aug 2013
Wrote TypeCheck.jl, a package for type-based static analysis of Julia code		Julia
Documented Julia webstack and interesting built-in APIs		Markdown
Participant, Recurse Center	New York City	Feb 2013 – May 2013
Participated in a 12 week self-directed programming workshop		
Built a Dropbox client for the Haiku operating system		C++, Python
Wrote a WebSockets implementation (WebSockets.jl)		Julia
Wrote a multi-threaded program and a tutorial about the features of Rust it used		Rust
Independent Study with Prof. Peter Froelich	Johns Hopkins	Sep 2012 – Dec 2012
Wrote a course management web application		Haskell
Worked with HappStack, HSP templates, HDBC, and Twitter Bootstrap		Haskell, CSS
Intern, Jane Street Capital	New York City	Jun 2012 – Aug 2012
Built internal tools: WebSockets server library, real-time charting library		OCaml, Javascript
Wrote an automated bot to compete in an internal trading tournament		OCaml
Research Project with Prof. Scott Smith	Johns Hopkins	Feb 2012 – May 2012
Wrote an interpreter for an experimental language		Haskell
Wrote a lexer and parser using Parsec		Haskell
Intern, Fog Creek Software	New York City	May 2011 – Aug 2011
Implemented new features for Kiln, including Image Diffs		C#, Python, Javascript
Statistical NLP Research Project with Prof. Mark Dredze	Johns Hopkins	Feb 2011 – May 2011
Wrote scripts to convert text files to SVM light format using a bag of words model		Python, Bash
Wrote final paper describing methods and results		LaTeX
Research Experience for Undergraduates	Harvey Mudd	May 2010 – Aug 2010
Implemented heap analysis tools, including code to talk to a 3D graph visualization engine		Python, Ubigraph

EDUCATION

M.S.E., Computer Science	Johns Hopkins	Sep 2011 – Dec 2013
◊ GPA: 3.54, Project: Type-related Static Analysis for the Julia Programming Language		
B.S., Computer Science	Johns Hopkins	Sep 2008 – Dec 2012
◊ GPA: 3.46, Dean's List 4 semesters		

SPEAKING EXPERIENCE

Inside Websockets

Open Source Bridge (40min)
 ACM Applicative (40min)
 PolyConf (40 min)

Portland Jun 2016
 NYC Jun 2016
 Poznan, Poland Jul 2015

How Julia Goes Fast

CodeMesh (45min)
 YOW! (1 hour)
 StrangeLoop (1 hour)

London, England Nov 2015
 Australia Dec 2014
 St. Louis Sep 2014

Intro to Julia Workshop

Chicago Julia Meetup (4.5 hours)
 IceCube Lab (3 hours)
 Chicago Julia Meetup (3 hours)
 Strata (3 hours)
 StrangeLoop (3 hours)
 LambdaJam (3 hours)
 Hacker School (3 hours)
 Johns Hopkins University (3 hours)
 Hacker School (2 hours)

Chicago Nov 2014
 Madison May 2014
 Chicago Feb 2014
 New York City Oct 2013
 St. Louis Sep 2013
 Chicago Jul 2013
 New York City Jun 2013
 Baltimore May 2013
 New York City May 2013

Intermediate Julia Workshop

Hacker School (2 hours)

New York City Oct 2013

More Julia Talks

Contributing to Julia (8 min) JuliaCon
 TypeCheck.jl (35 min) JuliaCon
 Intro to Julia (1 hour) Asana

Boston Jun 2015
 Chicago Jun 2014
 San Francisco May 2013

WRITING EXPERIENCE

Learning Julia (with Spencer Russell)

Not Yet Published

An introduction to Julia, focused on learning through examples of complete programs.

500 Lines or Less: Static Analysis

October 2015

<http://aosabook.org/en/500L/static-analysis.html>

A chapter introducing static analysis, using 500 lines of code from TypeCheck.jl.

Learn Julia in Y Minutes

July 2013

<http://learnxinyminutes.com/docs/julia/>

This is a brief introduction to Julia focusing on the syntax and a brief introduction to the type system.