

LEAH HANSON

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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 Vector Icon Format		C++
Paired on optimizing the performance of a Go game implementation		Python
Paired on understanding and parsing bplists		C
Implemented the Raft consensus algorithm		Go
Worked through parts of a Statics and a Linear Algebra textbook		Math
Paired on building a neural network to generate text in the same style as what it reads		Python, Tensorflow
Software Engineer, Stripe	Redmond, WA (remote)	July 2015 – July 2016
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

HVIF: 500-Byte Vector Images

Code as Craft (10min)	NYC	Oct 2016
Recurse Center (5min)	NYC	Oct 2016

Inside Websockets

Open Source Bridge (40min)	Portland	Jun 2016
ACM Applicative (40min)	NYC	Jun 2016
PolyConf (40 min)	Poznan, Poland	Jul 2015

How Julia Goes Fast

CodeMesh (45min)	London, England	Nov 2015
YOW! (1 hour)	Australia	Dec 2014
StrangeLoop (1 hour)	St. Louis	Sep 2014

Intro to Julia Workshop

Chicago Julia Meetup (4.5 hours)	Chicago	Nov 2014
IceCube Lab (3 hours)	Madison	May 2014
Chicago Julia Meetup (3 hours)	Chicago	Feb 2014
Strata (3 hours)	New York City	Oct 2013
StrangeLoop (3 hours)	St. Louis	Sep 2013
LambdaJam (3 hours)	Chicago	Jul 2013
Hacker School (3 hours)	New York City	Jun 2013
Johns Hopkins University (3 hours)	Baltimore	May 2013
Hacker School (2 hours)	New York City	May 2013

Intermediate Julia Workshop

Hacker School (2 hours)	New York City	Oct 2013
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More Julia Talks

Contributing to Julia (8 min) JuliaCon	Boston	Jun 2015
TypeCheck.jl (35 min) JuliaCon	Chicago	Jun 2014
Intro to Julia (1 hour) Asana	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.