Buck Shlegeris

(650) 660-9155

EMPLOYMENT

Paypal *Jan 2015 – present*
Software engineer

Scala developer, working with Cassandra, Couchbase, Akka, etc

App Academy *Jan 2014 – Jul 2014*
Teaching Assistant

Developed curriculum. Wrote and presented lectures. Provided one-on-one instruction and feedback. Developed and maintained internal Rails and Backbone tools. Taught Ruby, Rails, Javascript, and Backbone.js. Interviewed and vetted applicants.

EDUCATION

Australian National University *2012-2014*
Bachelor of Science (Computer Science, minoring in Physics)

Undergraduate coursework: Algorithms, operating systems, AI, algorithmic information theory and universal AI, theory of programming languages, computer architecture, linear algebra and ODEs, theory of computation

Director and presenter at CompCon, an inaugural Australian undergraduate CS conference; presented on algebraic behaviour of data structures

Completed two research projects and a variety of advanced undergraduate courses ahead of my year level.

SELECTED PROJECTS/CONFERENCE PRESENTATIONS

personal project *March 2015 – present*
Ruining the coding interview (github.com/bshlgrs/ruining-the-coding-interview)

Personal project to make a new kind of optimizing compiler, which automatically selects data structures based on analysis of the usage of objects

Presented at Scala By The Bay 2015 (https://www.youtube.com/watch?v=oPFga7eg3Uw)

Written in functional Scala

rPeANUt compiler [WIP] (bshlgrs.github.io/rpc/rpc) *mostly May 2014– July 2014*

Compiler from a subset of C including pointer arithmetic to a RISC instruction set

Currently partially deployed to the web as ScalaJS.

Graphical Equation Manipulator, Python prototype (github.com/bshlgrs/pygem) *2013*

Software for manipulation of equations in physics. Like Mathematica but user friendly and aimed at physics students.

Used Python, Sympy, Tkinter.

Developed software from conception to prototype to user studies with eleven users.

All eleven subjects thought the software let them work faster than Mathematica did.

SKILLS

General: Machine learning, deep learning, algorithms, operating systems, computer systems, C/C++/Java. Full stack web development, mostly in Rails, React, and Scala. *Languages:* Scala, Ruby, Python, Javascript, Haskell