Buck Shlegeris <bshlegeris@gmail.com>

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EMPLOYMENT

Australian National University *Dec 2013 – May 2014*
Web development contractor
- Built, deployed, and maintained a new submission system for the Introduction to Computer Science course, in Rails

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.

Australian National University *2013-2014*
Teaching Assistant
- Provided instruction in introductory Python, Java, and Haskell, as well as data structures and algorithms and software engineering principles. Developed assignments and exams. Delivered oral exams.

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

Australian National University *Nov 2013– May 2014*
Submission App (github.com/bshlgrs/submissionapp)
- Submission system in Rails, jQuery, and Unix shell scripting.
- Significant test suites (over 100 tests), to ensure reliability
- Designed interface for lecturers to customise behaviour of assignments on submission (e.g. Haskell compilation, automatic marking against test specs)

rPeANUt compiler (github.com/bshlgrs/rpeanut-compiler) *May 2014– current*
- Compiler from a subset of C including pointer arithmetic to a RISC instruction set
- Written in Scala as personal project

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 (esp. Linux kernel), computer systems, C/C++/Java

Web development: Ruby, Python, Rails, Scala, git, Javascript, HTML/CSS