Buck Shlegeris <bshlegeris@gmail.com>

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EMPLOYMENT

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

App Academy *Jan 2014 – present*
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*
Teaching Assistant
- Provided instruction in introductory Python and Haskell, as well as data structures and algorithms. Developed assignments and exams. Delivered oral exams.

EDUCATION

Australian National University *2012-2013*
Bachelor of Advanced Computing/Bachelor of Science (Physics) (not completed)
- Left after two years, with a High Distinction average
- Undergraduate coursework: Information theory, 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 Haskell data structures
- Took research courses and honours level courses in my second year.

SELECTED PROJECTS

Australian National University *Nov 2013– current*
Submission App
- 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)

Graphical Equation Manipulator, Python prototype (github.com/buckshlegeris/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.

Graphical Equation Manipulator, Coffeescript port (matthewja.com/gem) *Nov 2013–current*
- Supervised and assisted another web developer as he ported my Graphical Equation Manipulator and some of Sympy to Coffeescript
- Designed the computer algebra system Coffeequate, which we built for the project. Coffeequate is now the most fully featured open source CAS available for Javascript.
- Developed the pretty printing facilities of Coffeequate.

SKILLS

In descending order of expertise: Ruby, Python, Rails, Haskell, C/C++, Javascript, Unix, HTML/CSS, untyped lambda calculus, Java