Lewis J. Ellis

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Student seeking technical internship for summer 2014

Work Experience

Software Engineering Intern, App.net, May - August 2013

- Restructured test suite to reduce build times by 15%
- Developed a relevancy metric for place objects and used it to improve the quality of place search results
- Designed and implemented extensive improvements to annotations on API objects, making it easier for third party apps to represent relationships between posts, users, places, files, and media.

Student Developer, PennApps Labs, September 2012 - Present

- Build and maintain web services used by Penn's student body with Flask and Django
- Interview candidates and mentor new hires, introducing them to Python and SQL

Junior Counselor, Canada/USA Mathcamp, June - August 2012

- Planned and executed the camp-wide hiking trip, talent show, and feedback surveys; managed camp finances and visitor accomodations; taught campers to speedcube; made lots of liquid nitrogen ice cream
- Served as an RA and role model for campers; did whatever was necessary to make camp run

Teaching Assistant, University of Pennsylvania, January 2012 - Present

- CIS 120, a 2nd semester project-based course which uses OCaml and Java to cover programming patterns and data representation
- Teach a lab section, lead course-wide review sessions, hold office hours, grade projects and exams

Education

University of Pennsylvania, 2011 - Present

- Networked and Social Systems, a branch of CS focusing on applications of network theory. Expected BSE 2015. GPA 3.6.
- Coursework: Artificial Intelligence, Cloud Computing, Algorithms, Networked Systems, Theory of Networks, Databases, Advanced Functional Programming, Cryptography, Number Theory, Game Theory, Probability, Linear Algebra, Discrete/Combinatorial Math
- Organizer of PennApps, the largest college hackathon in the world, hosted at Penn each semester
- Lead organizer of PClassic, a programming contest for regional high schoolers which had over 200 participants last year
- Current club Ultimate player, former Penn Track & Field long jumper

Projects

- **QuestionsForMe** (HackNY S2013). Question queue for audiences to donate money to vote on questions for speakers or panelists to answer. Made in 20 hours with one teammate. Python/Flask, MongoDB, Venmo & Twilio APIs
- **Dropbox IDE** (2nd place HackRU F2012). Online IDE which uses Dropbox as the user's workspace. Made in 21 hours with two teammates. Ruby/Sinatra, JavaScript, HTML/CSS
- **TWFarmer** (2009). Track gamestate and statistics, and automate repetitive tasks like resource-farming in a web-based MMO game. PHP, MySQL, JavaScript
- **PSPNet, PSPTD** (2008). Text-based web browser, tower defense game, for PlayStation Portable. PSPTD was released to the homebrew community and downloaded over 1000 times. Lua

Technologies

- Lua, Python, Haskell, OCaml, Java, MySQL, Redis
- Sublime, Django, Flask, git, Heroku, AWS, MapReduce
- Familiar with C++, Ruby, LISP, Mongo, HTML/CSS/JavaScript