ALEX QUINLAN
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EDUCATION

Dual degree granted May 2011. BA Oberlin, BS Columbia University.

Columbia University, Fu School of Engineering and Applied Science New York, New York
September 2009 - May 2011
Major: Applied Physics

Oberlin College, Oberlin, Ohio
September 2006 - May 2009
Major: Five-year Engineering Program

Overall Combined GPA: 3.54
Programming and Computer Science GPA: 4.08
Programming Experience in: Java, Python (and Django), SQL, MATLAB, C#, HTML, CSS, JavaScript, Objective-C (iOS development), and assembly (MIPS)
Physics GRE: 800

SELECTED PROJECT EXPERIENCE

Optical Systems, Fall 2009. Attempted to simulate and analyze nonlinear light propagation using both finite-difference time domain and finite-difference spectral domain methods.

Data Structures in Java, Spring 2010. Implemented the RSA public-key encryption/decryption algorithm.

Computational Physics, Fall 2008. Used techniques such as Monte Carlo and finite-difference methods to implement a variety of physics-related programs. Simulated fluid flow and solar system formation, as well as a mesoscale model of a thermo-electric device as a final project. Also implemented a genetic algorithm to solve the Traveling Salesman Problem.

WORK EXPERIENCE

Freelance Developer, New York, New York. June 2012 to present.
Primarily a web developer for a number of small projects. I specialize in Ruby/Sinatra and SQL, but am also proficient in HTML, CSS, and JavaScript.

- MyTimeline.com: A semi-private online diary integrated with email. Built the backend (Ruby/Sinatra), frontend, and portions of an iOS app.
- Busker.fm: A music discovery service with integrated purchasing. Built the backend (Ruby/Sinatra).
- ArizonaDreamVacation.com: Portfolio page for a client's vacation rental. Backend and frontend.
- GifGrow.com: Fullsize GIF aggregator. Personal sideproject. It crawls Reddit and Tumblr for GIFs, and blows them up fullscreen. Built and designed.

AllianceBernstein, New York, New York. June 2011 to June 2012.
In the Technology Associate Program, I rotate through multiple projects over a two-year period, changing projects and giving talks to the IT executives on my accomplishments every six months. This provides a diverse exposure to the technologies and systems used by the firm.

- Spent six months designing and developing a large-scale (~$100M / day) multi-user spreadsheet application for the selling of municipal bonds using C# .NET and IBM's WebSphere MQ. The application is built to handle roughly $100M per day in orders.
- Currently co-ordinating vendor datafeeds in MS SQL, allowing the firm to reduce costs by phasing out duplicate data.
- Interviewed and recruited university students for IT positions at AllianceBernstein.