

Abhi Agarwal - github.com/abhiagarwal

Professional Experience

Software Engineer, NYU Residential and Housing Department, New York, NY Jan-May 2014

- Part of a team who build out the next residential and housing platform at New York University using a C#/MSSQL stack on the back-end and Javascript on the front-end. Simplified housing process for students and administration at NYU.

Software Engineering Intern, MedConsult, Bangkok, Thailand Jan-Aug 2011

- Part of team in the development of an expert system for diagnosing diseases.
- Designed the client-side API, using Play in Java, to allow projects to utilize the medical database, and allow the use of external parameters for the expert system.

Software Engineering Intern, Aptech, Bangkok, Thailand June-Aug 2011

- Worked with 3 companies to develop a comprehensive suite of server-side and client-side tools for jewelry management on a Visual Basics.NET/PHP/MYSQL stack.
- On average, for all 3 clients, this cut 13% cost and increase revenue by 4%.

Selected Projects

Side-project, Learnt.io May 2014-Present

- Platform too allow people to 'store' things they learn as a part of their knowledge map, and relate that knowledge in the future. Built on NodeJS and MongoDB.
- Building an artificial neural network to link information together, and to use this knowledge to give future suggestions on what things to learn.

Side-project, Dubsit.com August 2013-May 2014

- Rethinking the way individuals search social content online, and creating a platform that ranks output from Social Media websites (Reddit, Quora, Pinterest, Tumblr, Twitter, bit.ly, etc.).
- Designed Machine Learning, and ranking algorithms, in Python, that rank content based on the statistics (upvotes, comments, shares, etc) from social media websites. Allowing users to get highest voted on content in social media quickly.

Lead Developer, Nexious Medical Jan 2012-Aug 2013

- Designed a machine learning algorithm, in Java, that implemented MedConsult's medical database to predict diseases individuals could have at different altitudes with different conditions.
- Developing a wearable device that would allow the user to enter his condition on a mobile app, and the wearable device would facilitate in diagnostics with information on the user's altitude, blood pressure, and temperature.

Side-project, Habless.com Jan 2005-Aug 2011

- Created a platform on a PHP/MYSQL stack, at age 12, which allowed over 32,000 unique visitors per month, to listen to live music, discuss games, and interact.
- Licensed the back-end system to 62 clients at \$150 dollars a year, and also raised over \$10,000 of profit through sponsorships and advertisements.

Research

Simulations Jan 2014-May 2014

- The Traveling Disease: stochastic evolution of a disease across an isolated system of four cities connected by roads.
- Traffic: Steady-State Analysis of the One-Lane Roundabout.

- N-body: Analysis of change in orbit when changing masses of planets in a solar system.

Education

- Bachelors of Art in Individualized Study at Gallatin, New York University.
- Thesis: "Engineering Creation" focusing on Computer Science, and Knowledge.
- Classes: Compiler Construction, Computing with Large Datasets, Algorithmic Problem Solving, Artificial Intelligence, Physical Computing, Simulations, Computer Systems Organization, Basic Algorithms, Machine Learning, Dealing with Data, and Data Structures.

**Selected
Achievements
and Activities**

- Tech@NYU - E-Board, 2012-ongoing. Currently: HackDays & Freshman Circuit.
- Duke of Edinburgh - Gold Award, climbed Mt. Everest Base Camp, 2011 and Silver Award, climbed Mount Kinabalu, 2010.
- TED - co-organized TEDxBangkokPatanaSchool in 2011-2012, and TEDActive attendee in 2013.
- TechEX Thailand - Speaker, titled: "My Journey through Computer Science", 2012.
- Most Improved Student Award at High School; Improved from C average to an A+ average.

**Technical
Skills**

- Excel in: Python; Javascript & Node.JS; Java; C++; Git; SQL/MYSQL;
- Experience with: PHP; Go; Visual Basics.NET; Ruby; C#; C; Objective-C & Swift (iOS); Android; Backbone.JS; Ruby on Rails; MongoDB; Redis; Apache; Nginx; Linux;