GABRIELLE A. TAYLOR

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EDUCATION

Columbia University, School of Engineering. New York, NY. B.S. in Computer Science. Conferred Oct. 2018.

Immaculate Conception High School. Kingston, Jamaica. June 2013

EXPERIENCE

Junior Developer. *Carbon Five. San Francisco, CA. April 2018 - Present*

Carbon Five is a software consulting company that practices eXtreme Programming (XP), a form of agile software development. Work is done in a variety of languages and frameworks, but typically Ruby on Rails and Javascript. I work closely with clients, other developers, designers and project managers to help plan and implement software products. Clients I have worked with include SharesPost, a SEC accredited secondary securities brokerage platform, and Everlane, an ethical clothing design and manufacturing startup.

Full Stack Developer. *Present Company. San Francisco, CA. October 2017 - April 2018*

Present was a location based women's networking app on iOS, Android and web. I focused on backend work, and was one of two backend engineers. Work was in Java, JavaScript, React, and Google Cloud Datastore, hosted on Google App Engine. Added support for core features of the product. Developed internal tools to pull user analysis reports, created administrative console for user and content moderation.

Teaching Assistant. *Computer Science Department, Columbia University. January 2015 - August 2017*

TA over nine semesters for multiple classes, including: "Computational Aspects of Robotics", a graduate level overview of the application of computers and implementation details of typical problems in robotics; "Fundamentals of Computer Systems", an introductory class to digital logic and computer architecture and organization; "Data Structures in Java", an introductory class to data types and structures; and "The Art of Engineering", a CS/CE Department seminar for Freshman engineering students which involved writing firmware in C for an HP 20b Business calculator.

PROGRAMMING LANGUAGES, FRAMEWORKS, LIBRARIES AND TOOLS

- **Programming Languages:** Proficient in C, Java, JavaScript, Python, Ruby. Some C++, Pascal, Swift.
- **Web:** HTML, CSS and JavaScript. Ruby on Rails. Sass. React + Redux. Django. Node.js.
- **Databases**: SQL, PostgreSQL, MySQL, SQLite, Redis.
- **Functional Languages:** OCaml, Elixir
- **Instruction Sets and Hardware Description Languages:** LLVM IR, MIPS ISA, SystemVerilog
- **Markup Languages:** LaTeX, Markdown.
- **Numerical/Scientific Computing Languages, Libraries:** MATLAB, NumPy, SciPy, Matplotlib, Pandas, OpenCV
- **Package Managers:** Homebrew. Npm, Yarn, Webpack. RubyGems, Bundler.
- **Cloud Application Platforms:** Heroku, Google Cloud Platform
- **Version Control:** Git, Github
- **Continuous Integration:** Circle CI, Travis

PROJECTS

Columbia Makerspace Site Redesign. *Columbia University Makerspace. May 2017 - Sept. 2017*

Volunteered to help the Columbia Makerspace management do a complete overhaul of their website. Performed requirements elicitation with key stakeholders, analyzed needs for new website and did UX analysis to expose flaws with previous website. Redesigned site layout and mapping, and implemented design using Squarespace to allow staff to independently update site content. https://make.columbia.edu

Senior Project. *CS Department, Columbia University. Fall 2016 Semester*

Robotics and data structures visualization project using Sphero robotics platform to show path planning algorithms in real time on iOS app written in Swift. Project mentored by Paul Blaer, Lecturer In Discipline.

UI Design Final Project "Hatespotting". *Team mAPI, CS Department, Columbia University. December 2016*

Group Project. Used Google Places API to surface reviews of businesses which contained derogatory, hateful or questionable language, and show results on a geographic heat map. Entailed two weeks of usability design, heuristic analysis, prototyping, testing then implementation. Uses Google Places, Google Maps APIs, and HTML5 Local Storage. http://bit.ly/2iShHAH

Advanced Software Engineering, JP Morgan Chase Project. *Team ExceptionHandlers, CS Department, Columbia University. Fall 2016 Semester*

Group project. Involved requirements elicitation from brokers, stakeholders to establish needs for brokerage app to automate exchange-traded fund (ETF) trading. Algorithmic trading involved querying a market server, responding to changes by adjusting number of shares sold using a Time Weighted Average Price (TWAP) strategy. Implemented a brokerage dashboard displaying the realtime status of buys and sells in Django, Python, SQLite, and Bootstrap. CI using Travis. Awarded Second Place Prize by panel of JPM judges.

TECHNICAL COURSEWORK

- COMS4733 Computational Aspects of Robotics
- COMS6156 Topics in Software Engineering
- COMS4111 Introduction to Databases
- COMS3998 Undergraduate Projects in CS
- COMS4115 Programming Languages & Translators
- COMS4156 Advanced Software Engineering
- COMS4170 User Interface Design
- CSEE4140 Networking Lab
- CSEE4840 Embedded Systems
- CSEE4824 Computer Architecture
- CSEE4119 Computer Networks
- CSEE3827 Fundamentals of Computer Systems
- COMS3202 Discrete Math
- MATH2010 Linear Algebra
- SIEO4150 Intro to Probability and Statistics
- COMS3261 Computer Science Theory
- COMS3157 Advanced Programming
- COMS3131 Data Structures in Java
- ENGI1006 Intro to Computer Science in Python
- MSAE1001 Atomic Scale Eng. of New Materials

LANGUAGES

- Native proficiency in English, Jamaican Creole (Patois).
- Basic proficiency in Mandarin Chinese, Spanish.

EXTRACURRICULAR

- Application Development Initiative Labs, Columbia University, September 2015 - December 2015
- Columbia University Chamber Ensemble, Oboe and Piano, September 2014 - May 2015
- American Institute of Aeronautics and Astronauts, Columbia Branch, 2013 - May 2017
- ICHS Symphony Orchestra: First Oboist, Head of Wind Section and Orchestra Secretary, 2009 - 2013

HONORS & AWARDS

- First in the Caribbean in Computer Science Unit 2 Caribbean Advanced Proficiency Examination, 2013
- Third in the Caribbean in Computer Science Unit 1 Caribbean Advanced Proficiency Examination, 2012