Juan C. Torres

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EDUCATION

Dartmouth College, Hanover, NH

Bachelor of Arts (B.A.) in Computer Science — Mar 2017
- Overall G.P.A: 3.40, major G.P.A. 3.53
- Relevant courses taken: Discrete Mathematics in Computer Science, Software Design and Implementation, Compilers (received academic honor citation), Machine Learning, Algorithms, Numerical and Computational Tools for Applied Science, Calculus of Functions of One and Several Variables, Linear Algebra with Applications.

University of Copenhagen, Copenhagen, Denmark

Exchange program in Sociology — Aug 2015 – Jan 2016

Jorge Robledo Institute, Medellin, Colombia

Primary and Secondary Education — Jan 1999 – Nov 2011
- Class rank: 1/65, Finalist in state-wide *Chemistry* and *Physics and Mathematics* olympiads.

SKILLS

Programming Experience: *Advanced*: Python (scikit-learn, pandas), Kotlin, Java, C, Matlab. *Intermediate*: Shell script, Y86 (subset of X86 assembly), HTML & CSS, *Beginner*: C++, Javascript.

Other skills and tools: Database management (mysql), AWS instance management, LaTeX typesetting, Flex & Bison (tools for creating parsers), Logisim (tool for designing and testing digital logic circuits), Adobe Illustrator & Lightroom.

WORK EXPERIENCE

Jupiter Technologies, Chicago, IL

Summer software developer intern — Jun 2016 – Aug 2016
- Created and maintained automated pipeline to uniformize html versions of ebooks created by different volunteers around the world, which included identifying usable books, creating responsive stylesheets to make them mobile-friendly, and making their formats more uniform.
- Maintained mysql database and search index of books to show in the production website by considering each books usage friendliness on both mobile and desktop applications, as well as legal requirements.
- Monitored and controlled performance issues, e.g., files with sizes too large to load reasonably fast.

Dartmouth College Computer Science Department, Hanover, NH

Section leader for Introduction to Programming and Computation (Python) — Mar 2015 – Jun 2015

Section leader for Problem Solving via Object-Oriented Programming (Java) — Jan 2016 – Mar 2016
- Guided students in conceptually understanding the course material, and cemented their knowledge by leading them through a series of programming exercises, which I later graded and used to generate feedback presented to the course professor.
- Assisted students in improving, debugging, and fixing their code for course assignments in scheduled weekly help sessions.

Dartmouth College Spanish Department, Hanover, NH

Apprentice Teacher — Sep 2013 – Mar 2015
- Challenged students orally in Spanish to improve their language proficiency several times per week, and monitored and evaluated individual student performance.

PROJECTS

Machine Learning Kaggle Competition. Python (scikit-learn, natural language toolkit), Matlab.
- Competed in Home Depot's Product search relevance competition as final project for *Machine Learning* course.
- Predicted search relevance values for pairs of search terms and returned products by using methods such as decision trees, neural networks, and adaboost regressors.
- Cleaned and helped extract numerical features from text input using natural language processing techniques.

Compiler for C subset. C, flex, bison
- Implemented during the course of a term a basic compiler for a subset of the C language for *Compilers* class.
- Implemented front-end (parsing, syntactic analysis), internal representation (abstract syntax trees, three-address code), and back-end (translation to assembly) with another student for term-long project.

Design for Y-86 Processor. Logisim (tool for designing and testing digital logic circuits)
- Created during one term of *Computer Architecture* a working simulation of a processor that could execute programs written in Y-86 (subset of X-86 assembly).

Tiny Search Engine. C
- Created during the course of a term of *Software design and implementation* a working model of a basic search engine that would crawl, index, and let the user query its database for particular data.

CAMPUS ACTIVITIES

World Outlook Undergraduate Journal of International Affairs, Dartmouth College

Executive Editor, Web manager — Mar 2014 – Present
- Maintain organization's web presence, arrange journal's cover and create other graphic materials.
- Lead editing groups in editing and proofreading selected papers. Select papers to be published with other editors.

LANGUAGES

Native Spanish, intermediate French, beginner Latin.