Jay H. Ravaliya

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EDUCATION

New Jersey Institute of Technology	M.S., Computer Science	*May 2015 – December 2016 (expected)*
Rutgers University	B.S., Biomedical Engineering	*September 2009 – January 2014*

CERTIFICATES **Introduction to Computer Science**, HarvardX via edX. July 2015.

TECHNICAL

Languages: Proficient: Python, Swift, SQL, PHP, VBA. | Familiar: C, Java, Objective-C, JavaScript, Ruby, MATLAB.
Frameworks, Databases: Flask, Lumen, iOS SDK, CocoaPods, Bootstrap, jQuery, MySQL, SQLite.

PROJECTS

Cap & Skull Senior Honor Society, http://capandskull.org, *December 2015*.
- Led full-stack development of the site, worked with a designer and content creator and managed feedback from 100+ active members.
- Wrote the site using Python's Flask micro-framework. Stack included JavaScript, jQuery, Bootstrap, WOW.js and MySQL.
- Managed development and production environments. Used Git and shell scripts to automate deployment to Heroku and our VPS.

Find My Health, University of Pennsylvania's PennApps Hackathon. Available on GitHub. *September 2015*.
- Winners of Venture for America's **"Best Social Innovation Hack – Build Something That Matters"** Award!
- "Find My Health" is an iOS app that helps users with non-life-threatening emergencies find a hospital with the least ER Wait Time.
- Led Backend development including building the RESTful API, page scraping extensive data and integrating the Google Places API.

Events at NJIT, Apple App Store. Available on GitHub. *October 2015*.
- Wrote Python scripts to page scrape upcoming events at NJIT, store into an RDBMS and serve via a RESTful API.
- Made a Twitter bot, @EventsAtNJIT, to tweet upcoming events between 9am and 9pm at the top of each hour.
- Shipped an iOS app that allows students to view all upcoming and ongoing events on campus and share with friends.

Midloc, Apple App Store. Google Play. Available on GitHub. *July 2015*.
- Wrote and launched my first iOS Swift app that lists locations half way between two zip codes for distant friends to find places to meet.
- Iterated over code base multiple times to learn new technologies and approaches, including: building the app out using Storyboard and programmatically for iOS, using Parse and RESTful API for backend. The latter was deployed on Heroku and VPS, consecutively.

SOFTWARE EXPERIENCE

Software Engineering Intern, Elemental Path
January 2016 – Present
- Building Elemental Path's first set of Internal Web Tools, specifically a web-based IDE for RiveScript, a chat bot scripting language.
- Technical stack: PHP Laravel, JavaScript, MySQL, HTML/CSS, NGINX Web Service, and Amazon Web Services (EC2).

Undergraduate Research Associate, Rutgers University Center for Cognitive Science
June 2010 – July 2013
- Led software development in C++ and MATLAB for the Laboratory of Vision Research and Sensory-Motor Integration Laboratory.
- Worked on hardware development as well, specifically using Arduino which enabled us to better study depth perception in participants.

PREVIOUS EXPERIENCE

Supply Chain Analyst, PepsiCo – Pepsi Beverages Company
April 2014 – May 2015
- Filled a new role responsible for using data to generate insights, mitigate risks and improved preparedness for raw material procurement.
- Developed 15-20 Excel VBA applications (computation and UI) that continue to be used by Sr. Leadership (COO/VP-level), middle management, strategy teams and front-line employees across North America. Automation reduced my weekly effort to 6 hours per week.
- Led the development of our term's first algorithm-driven tools, which helped us identify $300,000+ cost savings for our team.

Contract Manufacturing Planner, L'Oréal USA – Piscataway Manufacturing
July 2013 – April 2014
- Hired as an Associate of the Management Development Program, responsible for managing 3 Contract Manufacturers.
- Led the production of 1 million units of L'Oreal products per month in collaboration with internal teams and business partners.

PUBLICATIONS

Jillian Nguyen, Ushma Madmujar, **Jay H. Ravaliya**, Thomas V. Papathomas, Elizabeth B. Torres. A novel, objective, statistical framework to characterize contributions of the sensory-motor system during perceptual state changes under a physical depth inversion illusion. Psychological Science. 2015.

Jillian Nguyen, Thomas V. Papathomas, **Jay H. Ravaliya**, Elizabeth B. Torres. Methods to Explore the Influence of Top-Down Visual Processes on Motor Behavior. Journal for Visualized Experiments. 2013.

LEADERSHIP

President, Engineering Governing Council (EGC)
May 2010 – May 2013
- I was elected to serve as the student body president of the School of Engineering, during which time I was responsible for leading 10 Executive Board members and 80 general members. Collectively, we represented the 3,500 Engineering students at the University-level.