Jay H. Ravaliya

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EDUCATION

New Jersey Institute of Technology, College of Computing Sciences
M.S., Computer Science, December 2016 (expected). GPA: 3.500.

Rutgers, the State University of New Jersey, School of Engineering
B.S., Biomedical Engineering, January 2014.

CERTIFICATES

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

TECHNICAL SKILLS

Languages:	*Proficient*: Python, Swift, SQL, PHP, VBA.
	Familiar: C, Java, Objective-C, JavaScript, Ruby, MATLAB.
Frameworks/Libraries:	Flask, Cocoa Touch, CocoaPods, Silex, Bootstrap, jQuery, Laravel.
Software:	Sublime, Xcode, Vim, Git, Windows, OS X, Linux, Unix, MS Excel.
Enterprise Software:	SAP Business Objects, Tableau, Oracle APEX, SAP R/3.

PROJECTS

Find My Health, University of Pennsylvania's PennApps Hackathon.
September 2015

- "Find My Health" is an iOS Swift app that uses historical data on wait times at emergency rooms across the nation to help users with non-life-threating emergencies determine which hospital in their area will best help them see a doctor as fast as possible.
- Led the backend development of the application, including page scraping for ER wait times, constructing a RESTful API atop Python's Flask microframework, and integrating Google API's to generate results. Constructed iOS views relevant to the backend application.
- Our hack won Venture for America's **"Best Social Innovation Hack – Building Something That Matters"** Award!

Midloc, Apple App Store, Google Play. Available on GitHub.
June 2015

- Built my first iOS Swift app that uses Google's Places API to help users find places to meet their friends half way between two zip codes.
- Iterated through code base 3 times, implementing improved approaches such as: Parse SDK, iOS MVC, CocoaPods, RESTful API.
- User base grew to 100 users, invited an Android Developer to build the app for Google Play, anticipating future versions!

INDUSTRY EXPERIENCE

Supply Chain Analyst, PepsiCo – Pepsi Beverages Company
April 2014 – May 2015

- Championed a new role responsible for building data analytics tools that could support raw material procurement for North America.
- Developed a series of automated, user-friendly Excel VBA Applications that helped me execute my job function in 6 hours per week. Applications continue to be used by Sr. Leadership (COO/VP-level), middle management, strategy teams and front-line employees.
- Led the development of our term's first algorithm-driven tools, which helped us identify $300,000+ cost savings for our team.
- Served as a liaison between IT and the business, assumed Associate Manager-level responsibilities within 6 months of joining.

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 across 3 global Contract Manufacturers.
- Strengthened relationships with and developed process improvement strategies with both business partners and internal support teams.

RESEARCH

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.
- Developed visual illusions using MATLAB's Psychtoolbox, such as the Reverse Phi or Multiple Attributes illusions.
- Architected a mechanical apparatus, controlled with an Arduino microprocessor, used to record motions from a human participant.
- Advocated for Undergraduate Research by representing our lab at multiple conferences, recruiting students to join our lab and more!

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.

HONORS

Cap & Skull Senior Honor Society, Rutgers University. Initiated May 2012.
Tapped for membership as one of eighteen members during junior year. More Information: capandskull.com.