Jay Patel

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Education

Georgia Institute of Technology - Online **August 2016 – December 2018**
Masters of Science in Computer Science **Overall GPA**: 4.00

Georgia Institute of Technology - Atlanta, GA **August 2011 – May 2016**
Bachelors of Science in Computer Science **Overall GPA**: 3.14
Major GPA: 3.65

Skills

- **Programming:** Java, JavaScript (AngularJS, D3.js, jQuery), SQL, NoSQL, HTML, CSS, MATLAB, C (Basic)
- **Standards & Frameworks:** RESTful Web Services (Jax-RS), JUnit, XML, JSON, Maven, ORM (proprietary XML/Java-based ORM framework called Mithra), Eclipse Collections (formerly GS Collections - supplement for the Java Collections Framework)
- **Software:** IntelliJ, Parse.com, Teradata, Eclipse
- **Version Control:** Git, Subversion

Professional Experience

Goldman Sachs – New York, NY **July 2016 – Present**
Technical Analyst

- Implemented JIRA based sprints to produce a front-end UI in AngularJS and a backend using Mithra (a proprietary ORM framework)
- Assisted in upgrading the infrastructure for an existing platform, including entitlement management migration, database upgrade, and host migration
- Gathering requirements, designing and implementing a new cloud based proprietary platform to uplift the platform in which users confirm trades for a particular asset

The Home Depot - Atlanta, GA **May 2015 – May 2016**
IT Intern – Software Development

- Developed a new Web Application for the merchandising team involving protection plan services through the entire Software Development Cycle interacting with the business, design, and database teams
- Ported old green screens written in COBOL to an enhanced user interface in Java and HTML using AngularJS as the front-end and Java RESTFUL web services as the back-end
- Conducted integrated testing on the application through verification of the databases and created triggers which sent the changes on the database to the 2,224 retail stores across the world

Health Informatics on FHIR – Atlanta, GA **August 2015 – May 2016**
Senior Design Project – Center for Disease Control (CDC)

- Collaborated with the CDC and developed a FHIR (Fast Healthcare Interoperability Resources) application that uses EMR/EHR data to improve the quality of data that is currently collected through death certificate forms
- Implemented Structured Data Capture (SDC) frameworks with FHIR resources for death reporting and developed an algorithm that helps physicians to determine the cause of death
- Created visualizations such as a Treemap and Directed Graphs and using D3.js and NetworkX respectively in order to display correlations between causes of deaths

Technical Experience

Bal Sevak Training (Youth Training) – Web Applications **April 2015 – Present**
Software Developer

- Created web applications to help automation of logistical processes across the nation while connecting with the Parse database
- Built an application website that allows users to submit their application form while having a save functionality
- Built a grading website that allows multiple graders to access submitted applications and analyze the submitted data
- Built a portfolio website that allows the volunteers to track progress of a youth and analyze the talents across the nation

Minimum Vertex Cover (MVC) Project – NP-Complete Problem **August 2015 – December 2015**

Algorithm Implementation

- Implemented 4 different algorithms such as Construction Heuristics with approximation guarantees, Branch-and-Bound exact algorithm, Local Search: Hill Climbing algorithm, and a Local Search: Simulated Annealing algorithm
- Evaluated the theoretical and experimental complexities on real world datasets to understand trade-offs between accuracy, speed, etc. across different algorithms

Leadership

BAPS – Non-Profit Organization **May 2011 – Present**

Regional Admin Reporter/ Youth Program Leader / Regional Coordinator/ Software Developer

- Planned and implemented over 50 different activities and projects on the local/regional level
- Organized logistically summer conventions involving over 500 youths
- Coordinate with various leads across the Northeast Region to ensure long-term goals are accomplished and projects are executed properly

Publications

Patel, Jay, Tilak Patel, Calvin Lin, Matt Nasiatka, Derrick Williams, and Vishnu Premsankar. "Data Mining of Sequential Patient Conditions for Death Reporting." *IEEE Engineering in Medicine and Biology Society*. Proc. Of 2016 IEEE International Conference on Biomedical and Health Informatics, Las Vegas, Nevada. EMBS, 1 Feb. 2016. Web.

Activities

- BAPS Campus Fellowship, Qurbani Dance Team – Captain, United Indian Student Alliance Fundraising Committee, GIT MAD (mobile apps), India Run of Hope- Fundraising Chair