

# Vir Thakor

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## SUMMARY

Inquisitive and adaptive software developer who helps users visualize and understand data. Specialty in web and data technologies. Passionate about creating cutting edge technology that improves people's lives.

## EDUCATION

University of California, Los Angeles — BS in Computer Science

2013 — 2017

### SKILLS

#### Languages:

C++, Python, PHP, JS (ES6), SQL, jQuery, Java, Bash Scripting

#### Concepts:

OOP, MVC Pattern, Serverless Architecture, Unit Testing, Agile/Scrum, UI/UX, UML, CI/CD

#### Data:

MySQL, RDS, PostgreSQL, DynamoDB, Octave/Matlab, MongoDB

#### Libraries & API:

RESTful API, React.js, D3.js, Google Maps API, Node.js, Angular.js, Datatables.js, Selenium, Django

#### Tools:

Amazon Web Services, Github, NPM, MySQL Workbench, Jira, Confluence, Jenkins, JAWS

#### Clearance

Confidential

### SELECTED COURSEWORK

Data Structures (C++), Web Applications, Intro to Data Mining, Software Engineering, Database Systems, Intro to Artificial Intelligence, Intro to Algorithms and Complexity, Mathematical Modeling

## PROJECTS

### Club Connect — Web/Mobile App

- Worked with team on platform for school organizations to streamline checking-in attendees to events using a mobile app that scans student IDs and loads members' profile.
- Developed management tool to acquire and visualize attendance statistics through a web app.
- Built on Swift and website with Node.js & Kinvey database.

### ML Handwritten Digit Recognition — Octave/Matlab

- Implemented Neural Network to classify images of handwritten digits and identify them correctly
- Used Logistic regression implemented in one-vs-all classification for each of the 10 digit cases

### EXPERIENCE

#### CVP Consulting — Software Engineer

July 2017 — Present

#### Centers for Medicare & Medicaid Services (CMS):

- Developing on platform for performance metrics reports and analysis of Medicaid programs' data as SaaS
- Reconstructed workflows to enhance and improve UI/UX in response to Acceptance Testing
- Led Section 508 Accessibility testing and achieved 100% compliance for major release
- Utilized LAMP stack, PHP Laravel, Unit Testing, MySQL, JS, Axure, JAWS, and Git

#### Pixt Fashion:

- DevOps for fashion startup using clothing image matching to enable price comparison of similar products across brands.
- Built CRUD inventory management site for clients to regulate their inventory
- Maintained and updated serverless backend and RESTful API using AWS
- Created API for clients to incorporate proprietary product image search into their websites
- Designed subscription billing functionality and registration for client stores through Stripe
- AWS Lambda, API Gateway, RDS, EC2, VPC, IAM, Cognito, S3, SNS, Cloudwatch, DynamoDB
- jQuery, Datatables.js, Gitlab, PostgreSQL

#### American Express — Software Engineering Intern

June — Aug. 2016

#### Global Authorizations Network Team in Phoenix, AZ

- Created Proof of Concept project analyzing the Key Management System and feasibility of implementing key rotations within DB manager through centrally managed implementation
- Researched options for encryption key lifecycle: generation, exchange, storage, use, shredding, and replacement
- Created internal Web App to manage uploaded testing information using LAMP stack

#### Department of Energy, — Software Engineering Intern

June — Sept. 2015

#### Energy Information Administration in Washington, D.C.

- Collaborated with a team to develop a Web Application that visualized the flow of commodities by volume via sea routes on an interactive global map
- Wrote procedures for user to generate customizable queries of trade routes based on commodity, source and destination. Then, developed the corresponding route visualizations for ratios of goods imported and exported
- Implemented modified Dijkstra's Algorithm to create interactive and animated navigation between cities, ports, and choke points of goods
- Utilized D3.js, HTML/CSS, jQuery, Oracle procedures, SQL

### Trip Cost Splitter — Web App

- Created Web Application that simplifies and streamlines splitting purchases between a group of people to output the amount each person owes another.
- Built using JavaScript, Node.js, jQuery.

**Random World Generator:** Used Noise functions and graph theory (including Voronoi diagram, centroids and Delaunay triangulation) to build a map with elevation and biomes.

**Branching Story Game:** Built platform for user to create and play a playable branching story with clickable options using jQuery

**Network Visualization:** UI to create a web of node connections with optional descriptions using D3.js