# VARSHA ALANGAR

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Visualization developer with over 2 year's professional experience working in a fast-paced, agile environment, focusing on designing and implementing dashboard solutions for geographic and relational data.

#### **EDUCATION**

MS in Computing (Graphics and Visualization) CGPA: 3.8 / 4.0 Spring 2017

The University of Utah – School of Computing, Salt Lake City, UT, USA

**B.E. in Computer Science and Engineering** CGPA: 8.88 / 10.0, Rank: 15 / 8069 Summer 2014

Anna University, Chennai, Tamil Nadu, India

## **CORE SKILLS**

JavaScript - Vue.js Framework, D3.js, JQuery, Node.js, JSON

MVC programming structure

Python

OpenGL, C++

GIT version control

PostgreSQL

JIRA task tracking

Confluence

Tableau

Visual Studio Code, Sublime

Microsoft Visio

Adobe Photoshop

#### **WORK EXPERIENCE**

### Data and Policy Analyst II – Data Visualization

Summer 2016 - Present

Acumen LLC, Burlingame, CA

- Lead front-end developer building dashboard solutions using JS and D3.js in a Vue.js framework and stress testing the tools for cross-browser compatibility before deployment.
- Deployed a series of 3 well received, client specific, standalone visualization tools to explore health care fraud data.
- Optimized project development time by creating reusable, interactive D3.js modules focusing on geographic visualizations, command-line cartography, force-directed graphs and tables.
- Improved team efficiency by setting CSS style guides, coding and documentation conventions after researching and testing JS libraries and frameworks.
- Supervised new members through team standards in code refactoring stages; oversaw and managed JIRA sprint tasks.

## **Software Engineering Intern**

Elsevier (Amirsys Inc), Salt Lake City, UT

- Programmed a search engine (using SOLR) to look for existing book illustrations stored in a *PostgreSQL* database.
- Gained experience in agile development process, importance of testing, and pushing code into production.

## **Graduate Teaching Assistant**

Fall 2014 - Spring 2015

University of Utah, Salt Lake City, UT

Conducted lab sessions, held office hours and evaluated over 60 students in the Foundations for CS course.

## **ACADEMIC PROJECTS**

# **Interactive Computer Graphics**

Spring 2017

- Produced 3D graphics with complex *OpenGL* and GLSL shader algorithms like transformations and texture maps.
- Implemented and presented a comparative study of 4 Non-Photorealistic Rendering Approaches.

**Caleydo Entourage** Fall 2015

- Created aesthetically pleasing D3.js visualizations for efficient multi-pathway analysis of the KEGG database.
- Extracted, represented and dynamically updated selected paths from experimental data shown as a network.

### **High Accuracy Question Answering System**

Fall 2015

Secured 3rd position for the highest accuracy QA system among 40 others; generating responses to queries from articles using NLTK Toolkit and Rule-based techniques for Natural Language Processing in Python.

#### **Social Media Mining**

Worked on the IMDb dataset, extracted the relationship between movie ratings and its success, and visualized the results using Tableau.

#### **PUBLICATION**

Alangar, V., Swaminathan, A. (2013) "Regulated Distance Algorithm in Large Networks for Graph Partitioning", International Journal of Engineering Research and Technology, Vol. 2 (09), 2013, ISSN 2278 - 0181