

Varsha Alangar

Front-End Application Developer with 3+ years of experience designing and developing visualizations-driven web applications.
Specialized in JavaScript, Vue.js, Data Visualization with D3.js

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EXPERIENCE

Front-End Application Developer II

DEC 2019 - PRESENT

The SPHERE Institute (Acumen, LLC) – Burlingame, CA

- Developing a data-driven, large-scale, single-page application for fraud investigations using JavaScript, D3.js and Vue.
- Managing application data using PostgreSQL and writing required data calls to retrieve information from the database.

Data Visualization Developer III

JUN 2016 – DEC 2019

The SPHERE Institute (Acumen, LLC) – Burlingame, CA

- Founding member of the Visualization Group at SPHERE; primary developer on 3 successfully delivered, single-page applications; involved in design prototyping, implementing responsive pages, and cross-browser testing.
- Specialized in creating D3.js modules that support analysis of geographic and network datasets ranging from 10,000 to 1 million records.
- On-boarded new team members, drove brainstorming sessions, client meetings and represented team at company-wide talks.

Software Engineering Intern

MAY 2015 - AUG 2015

Amirsys, Inc (Elsevier Clinical Solutions) – Salt Lake City, UT

- Programmed a search engine (using SOLR) to look for existing book illustrations stored in a PostgreSQL database.

Graduate Teaching Assistant

AUG 2014 - MAY 2016

University of Utah – Salt Lake City, UT

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

EDUCATION

MS in Computing (Graphics and Visualization)

Program of Study GPA: 3.8 / 4.0

MAY 2017

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

B.E. in Computer Science and Engineering

Anna University, Chennai, Tamil Nadu, India

CGPA: 8.88 / 10.0, Rank: 15 / 8069

APR 2014

PROJECTS

Force-directed Graph Application

DEC 2017

- Developed a standalone, dual-page application to visualize over 100,000 connections. Included graph zooming, panning, node collapse and network expansion features to improve navigation through dense networks.

Map Based Tools

JUN 2017

- Developed heat maps and cartograms using *D3.js* to analyze geographic distribution of information.
- Worked extensively on *TopoJSON* and geospatial data to display relationships of nodes on the map.
- Improved the performance and load speed of tools by 90% using command-line cartography technique.

Interactive Computer Graphics

MAY 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.

High Accuracy Question Answering System

DEC 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*.

SKILLS

JavaScript, HTML

CSS, Flexbox

Vue.js, React.js

MVC framework

D3.js, SVG

JSON, TopoJSON

Webpack

Python, OpenGL

PostgreSQL

Git version control

JIRA project tracker

Microsoft Visio, Moqups

Tableau, Adobe Photoshop

VS Code, Sublime IDE

Confluence documentation

Agile development

Project presentation