Shweta Purushe

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Interested in: Data visualization and analytics, bioinformatics, software engineering

Experience:

Software Developer at *Weave Visual Analytics* **(February 2016 – August 2016)**

- Managed, designed and implemented framework to customize sessioned dashboard using Javascript (ES6), ReactJS, HTML5, CSS3, Webpack, Babel, Npm
- Martin's Point Health Care (MPHC): Implemented card and dashboard views for internal health risk score model system using Javascript (ES6), Typescript, ReactJS, HTML5, CSS3, Webpack, Babel, Npm
- ELM, Kingdom of Saudi Arabia: Designed and implemented data API for navigation and querying geographical and national indicator hierarchies to drill down between multiple views using Javascript
- Editor UI to facilitate selection and asynchronous retrieval of data attributes using ReactJS, HTML5/CSS3, Typescript, JAVA - Web service
- Ported Data-crumb UI from AngularJS to ReactJS to browse data hierarchy model.

Chief Architect / Doctoral Thesis at *IVPR* **(August 2012 -   December 2015)**

- **Weave Analyst:** Designed and implemented an open source visual analytic platform enhancing analytic power of visualizations from computations run in external statistical engines such as R, Python and Stata using Javascript, AngularJS, Java, R, Python, Stata.
- Implemented a Round-trip Pipeline architecture between analytic and visualization engine using Javascript (IIFE pattern).
- Designed and Implemented Data-Crumb UI to columns in a Tables across sibling and children using AngularJS, Javascript
- Created an 'R project' package to run Weave as a visualization widget from the R console using the 'htmlwidgets' framework in Javascript and R.

Software Developer - Analyst / Research Assistant at *IVPR* **(December 2009 – December 2015)**

- Design and implementation of class discrimination algorithms in RadViz visualizations to improve the factors to identify the correlation in Raw Data in Weave, using ActionScript, JAVA and R.
- R-Script editor: Implemented interaction and computation API interface to collect data for R computation and visualize its result in parallel with original Raw data using R, JAVA, rJava, Actionscript3, Flex 4.5
- Implementation of an interactive Ramachandran Plot and Protein Data Bank web-service for plotting secondary structures of proteins using ActionScript 3 and JAVA.

Languages: TypeScript,Javascript, HTML5, CSS3, JAVA, R, Python, Perl
Frameworks: ReactJS, AngularJS, Flex3/4.5
Techniques: AJAX, Object Oriented Design, Agile, Software Development Life Cycle
Database: MySQL, SQL
Tools(IDEs): Eclipse, Webstorm, Flash Builder 4.7
Tools: WEKA, Tableau, R-Studio, Gulp, Grunt, Git, Github

Education: **Ph.D. Biomedical Engineering and Biotechnology (Interdisciplinary)**
Dept. of Computer Science)   (2009 - 2015)
University of Massachusetts, Lowell, MA (GPA: 3.86)
M.Sc. Microbiology, *University of Pune,* Pune, India   (2006- 2008)