VISHNU VARDHAN DHANABALAN

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SKILLS

Languages	TypeScript, JavaScript, Python, Java, C++
Front-end	ReactJS, Redux, Angular, Webpack, Jasmine, Enzyme, Jest, HTML5, CSS, jQuery
Back-end	NodeJS, ExpressJS, Flask, Django, Mocha, pytest
Database	MongoDB, MySQL, PostgreSQL, Redis
Cloud	AWS (EB, EC2, S3, Lambda), Azure (App Services, Azure DevOps, VM)
Others	Docker, RESTful, GraphQL, GIT, JIRA, TDD, Agile

EXPERIENCE

Robert Bosch Engineering and Business Solutions - Coimbatore, India   *Dec 2018 – March 2020*

Senior Software Engineer (Full-Stack) **TypeScript, NodeJS, ReactJS, Redux, Python, Flask, MongoDB**

- Took complete ownership of a microservice that converts designs from Adobe XD and Sketch to HTML AST data, using MongoDB and setup the CI/CD in Azure VM using Azure DevOps.
- Implemented custom version handling for AST based data that are stored as MongoDB BSON.
- Developed Adobe XD and Sketch App plugins in JavaScript that export Artboards to HTML format.
- Led a team of 4 in designing the front-end architecture (React + Redux state tree, API requirements) of a web application that streamlines UI screen prototyping to code generation for platforms like Android, Qt and Web.
- Implemented several key front-end features, reusable components and interactive SVG widgets for a WYSIWYG web editor application, using ReactJS, Redux and styled components.
- Developed and delivered an internal backend service for work packet dispatching in Python using Flask and MySQL.
- Created an ElectronJS + ReactJS app as a POC to simulate Human Machine Interface (HMI) of high-end home appliances, which improved the usability testing experiences.

Euphony Inc., - Syracuse, NY, USA   *April 2016 – May 2018*

Software Developer **Python (Tkinter, NumPy), C/C++, Java (Swing), MATLAB**

- Spearheaded the development and maintenance of VoiceFactory, an internal GUI application, written in Python using Tkinter, NumPy libraries.
- Streamlined synthetic voice building process from raw voice data sanitation to developing voice models with DSP and ML techniques using Python scripts.
- Improved runtime performance of DSP algorithm implementations in VoiceFactory by replacing legacy code implementations with a multithreaded design.
- Built a GUI desktop analyzer tool using Java, in conjunction with Praat to generate DSP feature extraction results on large sets of speech data.

The MathWorks Inc., - Natick, MA, USA   *May 2015 – August 2015*

DSP System Toolbox Development Intern **C/C++, MATLAB, Simulink**

- Created System Objects™ and Simulink for audio effects and audio plugin generation feature for Audio System Toolbox™.
- Worked closely with User Experience Team and performed usability testing for Audio System Toolbox™.

PROJECTS

CryptoNotifier: Performs automated technical analysis (MACD) on tickers and notifies via email. **Python and MySQL**

CopRobot: An autonomous object tracking robot using **OpenCV and Python running on Raspberry Pi and Arduino**.

EDUCATION

Syracuse University, Syracuse, NY, USA   *Jan 2014 – Dec 2015*

Master of Science – Electrical Engineering

Anna University, Chennai, India   *Sep 2009 – May 2013*

Bachelor of Engineering – Electrical and Electronics Engineering