SRINIVASA KARTHIC **PONGURU**

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Summary

A highly skilled and motivated Full-Stack Software Developer with the ability to visualize abstract algorithms and dynamic data structures. A non-linear thinker proficient in Object Oriented Programming (OOP) and Design (OOD) with a strong belief in Test Driven Development and a passion to build beautiful, responsive, cross-device compatible applications which create an immersive experience for the user.

Education

MASTER OF SCIENCE | UNIVERSITY OF HOUSTON | HOUSTON, TEXAS   **| MAY 2017 |**
· Major: Computer and Systems Engineering | GPA: 3.78

BACHELOR OF ENGINEERING | ANNA UNIVERSITY | CHENNNAI, INDIA   **| MAY 2014 |**
· Major: Computer Science and Engineering | GPA: 8.97

NANODEGREE | UDACITY   **| DEC 2017 |**
· Program: Full Stack Web Developer

Technical Skills

Languages	: Python, Java, C#, C++, JavaScript (ES2015/ES2016), SQL, HTML5, CSS3
JavaScript Frameworks / Libraries	: jQuery, AngularJS, Angular, D3.js, knockout.js, AJAX, Node.js, Backbone.js
Python Web Frameworks	: Django, Flask, webapp2
Front-End Frameworks / Tools	: Bootstrap, Semantic-UI
Database Management Systems	: MySQL, MS SQL, MS Access, PostgreSQL, SQL Server (2016/2012), Oracle (12c,11g)
Google Cloud Platform	: App Engine, Cloud Datastore
JavaScript Task Runners	: Grunt, Gulp
Version Control	: Git, SVN, TFS
Operating Systems	: Windows, Linux (Ubuntu)

Experience

SOFTWARE DEVELOPER | SLIDKA INC   **| JUNE 2016 – PRESENT |**
· Collaborated with a cross-functional technical team to develop a real-time application with Python and Django Framework where registered users can select or cancel a certain service from a list of services available within various departments and new users can register with a user authentication and authorization system.
· Designed and implemented a reporting tool that summarizes required data by using Python and Flask with SQLAlchemy as an Object Relational Mapper (ORM) for querying the PostgreSQL database and to perform CRUD operations.
· Worked in Agile-Scrum development methodology.
· Utilized Amazon LightSail for deploying Linux server instances using a virtual machine running Ubuntu 16.04.
· Built the UI for the website with HTML5, CSS3, AJAX, JavaScript, jQuery and knockout.js (which uses Model-View-ViewModel pattern).
· Designed and developed Single Page Applications (SPA) using knockout.js (M-V-VM) and worked with RESTful web services and APIs.
· Used jQuery's AJAX methods to reduce page reloads and for transmitting JSON data objects between front-end views and controllers.
· Used various JSON APIs to translate the JSON data into a Python dictionary.
· Utilized automation tools (Grunt/Gulp) in development workflow saving the team 40 hours of work a month.
· Worked with SQL Server databases in writing PL-SQL stored procedures, triggers, views, and cursors.
· Responsible for creating the database in SQL Server and PostgreSQL using SQLAlchemy ORM.
· Utilized OAuth and integrated third-party sign-in solutions into web applications.
· Used knockout.js to create models that represent data and controllers to handle events triggered by clients and send request to server.

FULL-STACK DEVELOPER (GA) | UNIVERSITY OF HOUSTON   **| SEP 2016 – MAY 2017 |**
· Worked in partnership with the technical team and professors to develop and maintain web applications and web pages with separation of concerns by following the Model-View-*(Template/Controller) architecture using Django framework and AngularJS.
· Involved in developing back-end modules, web applications and REST APIs using Python.
· Utilized Vagrant for maintaining portable virtual software development environments and for deploying independent Linux servers with their own firewall configuration using a virtual machine running Ubuntu.

- Dealt with writing front-end component code using HTML5, CSS3, Bootstrap 3, JavaScript, jQuery and AngularJS.
- Designed and developed Single Page Applications (SPA) using AngularJS and implemented Two-Way Data-binding in AngularJS to handle automatic synchronization of data between the model and view components.
- Engineered data visualizations with D3 and custom AngularJS directives for professors to view grades.
- Created and implemented SQL Queries, Stored procedures, Functions, Packages and Triggers in SQL Server 2012.

RESEARCH ASSISTANT | UNIVERSITY OF HOUSTON | MAR 2016 – SEP 2016 |

- Involved in designing ER models and database schema for exam scheduling system to represent student and course information and developed the tables with required constraints, relations and normalization rules in SQL Server 2012.
- Involved in building database Models, Views and APIs utilizing Python and developed front-end modules including the presentation layer with HTML, CSS, AJAX, JavaScript, jQuery and Backbone.js to build an interactive web-based solution.
- Set up rules and policies with Node.js and developed the back-end modules with Python and Java.
- Refactored existing code with separation of concerns by using the Model-View-*(Presenter/Controller) organizational architecture.
- Developed project-specific Java APIs as per requirements with effective usage of Data Structures, Algorithms and OOP concepts.
- Used jQuery's AJAX methods for transmitting JSON data objects and to reduce page reloads and load times.
- Utilized Git for version control.

WEB DEVELOPER | IIS TECHNOLOGIES | CHENNNAI, INDIA | MAY 2014 – JUL 2015 |

- Served as part of a high-performing agile software engineering team in the role of a web developer working with HTML, JavaScript, CSS, Java and Python.
- Conducted extensive site monitoring and testing utilizing developer tools; found and fixed the website problems such as broken links, typographical errors, and formatting inconsistencies.
- Helped in developing responsive, cross-device compatible websites which create an immersive experience for the user, using jQuery, JavaScript, AJAX and Bootstrap.
- Utilized jQuery and JavaScript to select HTML elements, manipulate the DOM and change a webpage dynamically.

Projects

DESIGN A TOURNAMENT RESULTS DATABASE | APR 2017 – MAY 2017 |

- Developed the database schema and built a PostgreSQL relational database scheme to store the results of a game tournament.
- Wrote Python code and SQL queries to query this data and efficiently report the results of the tournament and determine the winner.

ITEM CATALOG | MAR 2017 – APR 2017 |

- Created a restaurant content management system where users can sign in to create, update or delete restaurants and menu items.
- Developed back-end code using the Flask framework in Python and engineered front-end UI with HTML, CSS, JavaScript and jQuery.
- Hosted application on AWS Linux server and created an authentication system via OAuth for users to sign in or register.
- Designed and created a PostgreSQL database to store all the user, restaurant and menu data.

NEIGHBORHOOD MAP APPLICATION | MAR 2017 – APR 2017 |

- Developed a Neighborhood Map web app that is fully responsive using HTML5, CSS3, knockout.js, and the Bootstrap framework.
- The application uses the Google Maps, New York Times and Foursquare APIs to show and give relevant information about a place.
- The page reads content from a JSON file using jQuery's AJAX functions and dynamically displays it within a provided template.

MOVIE TRAILER WEBSITE | FEB 2017 – MAR 2017 |

- Wrote server-side code in Python to store a list of movies, including box art imagery and a movie trailer URL.
- The data was later served to a web page using HTML, CSS and JavaScript allowing visitors to watch different trailers.

Publication

HYBRID GENETIC ALGORITHM APPROACH FOR MOBILE ROBOT PATH PLANNING | DEC 2014 |

Advances in Natural and Applied Sciences (ISSN: 1995-0772), 8(17) Special 2014