SRINIVASA KARTHIC PONGURU

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Summary

Highly skilled and motivated graduate student with the ability to visualize abstract algorithms and dynamic data structures. A non-linear thinker with a strong belief in Test Driven Development that has subsumed YAGNI. Wide ranging knowledge in Full-Stack web development encompassing both front-end and back-end development.

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: Electrical and Electronics Engineering | GPA: 3.67

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

Technical Skills

Languages	: Python, Java, C#, C++, JavaScript (ES2015/ES2016), SQL/GQL, HTML5, CSS3
JavaScript Frameworks / Libraries	: jQuery, AngularJS, D3.js, Node.js, Backbone.js, JavaScriptMVC, React
Python Web Frameworks	: Flask, Django
Frontend Frameworks / Tools	: Bootstrap, Semantic-UI
Python Template Engine	: Jinja2
Database Management Systems	: MySQL, MS SQL, MS Access, PostgreSQL, Oracle
Google Cloud Platform	: App Engine, Cloud Datastore
JavaScript Task Runners	: Grunt, Gulp
Operating Systems	: Windows, Linux (Ubuntu)

Experience

FRONT-END WEB DEVELOPER (GA) | UNIVERSITY OF HOUSTON   **| OCT 2016 – MAY 2017 |**
· Collaborated with a cross-functional technical team and professors to add/edit course content web pages to the CASA site and helped maintain the website.
· Utilized automation tools (Grunt/Gulp) in development workflow saving the team 20 hours of work a month.
· Dealt with writing front-end component code using JavaScript, jQuery, and React.
· Engineered data visualizations with d3 and custom AngularJS directives for professors to view grades.

RESEARCH ASSISTANT | UNIVERSITY OF HOUSTON   **| JUN 2016 – SEP 2016 |**
· Involved in designing database schema for exam scheduling system and developed the tables with relations.
· Worked with ER models, Relational Schemas to represent student and course information.
· Worked with SQL Server 2008 databases in writing PL-SQL stored procedures, triggers, views, and cursors.
· Developed responsive dashboards to display predictions and other statistical findings using HTML5, AngularJS, JavaScript and D3
· Participated in code reviews and helped in testing the codes.
· Assisted in preparing technical papers, reports, documents, and presentations as per requirements.

WEB DEVELOPER INTERN | IIS TECHNOLOGIES | CHENNNAI, INDIA   **| JUL 2014 – MAR 2015 |**
· Served as part of a high-performing agile web applications engineering team in the role of a web developer working with HTML, JavaScript, CSS, and Enterprise Java.
· 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 3 responsive, cross-device compatible websites which created immersive experiences, using JavaScript.

Projects

LINUX SERVER CONFIGURATION | MAY 2017 – JUN 2017 |
· Use a baseline installation of a Linux distribution on a virtual machine and prepare it to host web applications.
· Ensure installation of updates, secure it from various attack vectors and install/configure web and database servers.

DESIGN A TOURNAMENT RESULTS DATABASE | APR 2017 – MAY 2017 |
· Developed a database schema to store the game matches between players.
· Wrote code to query this data and determine the winners of various games.

MULTI USER BLOG | MAR 2017 – APR 2017 |
· Created a multi user blog for users to sign in and create blog posts, 'Like' and 'Comment' on other posts.
· Hosted blog on Google App Engine and created an authentication system for users to sign in or register.

BUILD A PORTFOLIO SITE | MAR 2017 – APR 2017 |
· Developed a personal portfolio using HTML, CSS, JavaScript, and the Bootstrap framework.
· The page reads resume content from a JSON file and dynamically displays it within a provided template.
· Web page is fully responsive and works on mobile, tablet, and desktop browsers.

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.

DEEP LEARNING | OCT 2016 – DEC 2016 |
· Evaluated the efficiency of cloud based deep learning across Amazon Web Services, GCP & Microsoft Azure.

HBASE, OPENSTREETMAP AND POKEMON GO | OCT 2016 – NOV 2016 |
· Import the OpenStreetMap and Pokémon Go data to HBase, and perform several simple queries.
· Understood the concept of importing data to HBase and querying the HBase.

K-MEANS CLUSTERING OF AMAZON REVIEWS | SEP 2016 – OCT 2016 |
· Created 400 sets of related product items based on ratings using K-means / canopy clustering algorithms.
· Analyzed the effect of running the algorithms on a large data set using Amazon Cloud.

MIPS INTEGER PIPELINE SIMULATOR USING JAVA | MAR 2016 – MAY 2016 |
· Simulation of MIPS integer pipeline. The MIPS pipeline simulator loads a specified file recording a sequence of MIPS instructions, and outputs timing information in the MIPS pipeline.

TASK SCHEDULING WITH IMPROVED TIMING PERFORMANCE | FEB 2016 – MAY 2016 |
· Developed a task scheduling simulator by employing preemption threshold scheduling using C with improved timing performance of 7.52%.

Certification

COURSERA | HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY | JUN 2017 |
· Program: Full Stack Web Development

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