

SRINIVASA KARTHIC PONGURU

Full-Stack Software Developer in perpetual beta

Houston, TX
+1 (832) 908-6965
karthic.ponguru@gmail.com

LinkedIn <https://www.linkedin.com/in/karthic-ponguru/>
GitHub <https://github.com/karthic-psa/>
Website <https://karthic-psa.github.io/>

EDUCATION

Master of Science - Computer and Systems Engineering | **University of Houston**
Bachelor of Engineering - Electrical and Electronics Engineering | **Anna University**

Graduated: May 2017

Graduated: May 2014

WORK EXPERIENCE

SOFTWARE DEVELOPER | AVVENTIS TECH INC

JUN 2017 – PRESENT

- Collaborated with a cross-functional team to develop and deploy a scalable and modular user registration system with Python and Django.
- Designed and implemented a reporting tool that summarizes required data by using Python, Flask, SQLAlchemy (ORM) and PostgreSQL.
- Worked in Agile-Scrum development methodology.
- Built the UI for the website with HTML5, CSS3, AJAX, JavaScript, jQuery, knockout.js and worked with RESTful web services and APIs.
- Created databases with required constraints and relations in PostgreSQL and used SQLAlchemy to perform CRUD operations.
- Used AWS Amazon S3 for storage and Amazon LightSail for deploying Linux server instances on a virtual machine to host web applications.
- Helped grow revenues, accelerated customer acquisition and increased web traffic to the site by 10%.

FULL-STACK DEVELOPER (GA) | UNIVERSITY OF HOUSTON

SEP 2016 – MAY 2017

- Worked in partnership with the technical team to develop a student performance evaluation application using Django and AngularJS.
- Developed back-end modules, web applications and REST APIs using Python, Django and conducted unit testing with PyUnit.
- Utilized Vagrant for maintaining portable virtual software development environments and for deploying independent Linux servers.
- Engineered data visualizations with D3 and custom AngularJS directives for professors to view grades.
- Implemented SQL queries, views, stored procedures, and triggers in MySQL and also parsed JSON data into Python dictionaries.

RESEARCH ASSISTANT | UNIVERSITY OF HOUSTON

MAR 2016 – SEP 2016

- Designed ER models and database schema for an exam scheduling system to represent student and course data in MySQL and PostgreSQL.
- Built database Models, Views and APIs using Python and wrote front-end code with HTML, CSS, AJAX, JavaScript, jQuery and Backbone.js.
- 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-*(Controller/ Presenter) organizational architecture.
- Developed project-specific Java APIs as per requirements with effective usage of Data Structures, Algorithms and OOP/OOD concepts.
- Created JSON endpoints to serve data and used jQuery's AJAX methods for transmitting JSON data objects and to reduce page reloads.

WEB DEVELOPER | IIS TECHNOLOGIES | CHENNAI, INDIA

MAY 2014 – JUL 2015

- Served as part of a high-performing agile engineering team in the role of a web developer working with HTML, JS, CSS, Java and Python.
- Conducted extensive site monitoring and testing utilizing developer tools; found and fixed various website problems and bugs.
- Developed responsive, cross-device compatible websites using jQuery, JavaScript, AJAX and Bootstrap.
- Performed JUnit testing and used Git for source and version control.

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.
- Used 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.
- Data was later served to a web page created by using HTML, CSS, Bootstrap and JavaScript allowing visitors to watch different trailers.

TECHNICAL SKILLS

Languages : Python, Java, C++, JavaScript (ES2015/ES2016), SQL, HTML5, CSS3
JavaScript Frameworks / Libraries : jQuery, Angular, D3.js, knockout.js, AJAX, Node.js, Backbone.js
Python Web Frameworks : Django, Flask
Front-End Frameworks / CSS Preprocessors : Bootstrap, Semantic-UI, Less, Sass
Database Management Systems : MySQL, MS SQL, MS Access, PostgreSQL, Oracle (12c,11g)
Cloud Technologies : AWS - LightSail, EC2, S3; GCP - App Engine, Cloud Datastore
Testing Frameworks / Tools : JUnit, PyUnit, Grunt, Gulp, Git, SVN, VMware, Vagrant

CERTIFICATIONS

NANODEGREE - Full Stack Web Developer | **UDACITY**