AVINASH VELLINENI

3001 S King Drive, Apt 1202 Chicago IL-60616 | (312) 714-7036
https://www.linkedin.com/in/avinash-vellineni-3586a013b/ | https://avinashvellineni.github.io/ | avellineni@hawk.iit.edu

Profile

- 2 years of professional IT experience in Systems Design, Development, Enhancement, Testing, Integration, maintenance/support and Implementation of Web Applications.
- Exceptionally organized, proven track record of outstanding results and demonstrating self-motivation.

Education

ILLINOIS INSTITUTE OF TECHNOLOGY, CHICAGO, IL — **AUG 2017 – MAY 2019**
Master of Science in Computer Science — **GPA:** 3.77/4
Data Analytics Specialization

Madras Institute of Technology, ANNA UNIVERSITY, INDIA — **AUG 2011 -- MAY 2015**
B. TECH, Electronics and Communication Engineering — **CGPA:** 8.46/10

Technical Skills

LANGUAGES : SQL, C, C++, Java, JavaScript, R, HTML, CSS, Python, Angular Js, Angular 5+, Bootstrap, Servlets, Spring Boot, React Js
DATABASE : MySQL
WEBSERVICES : RESTful, JPA
TOOLS : Eclipse, RStudio, Microsoft Office Suite, Visual studio code, Git, Jenkins, Docker
OS : Windows, Linux
Platforms : Pivotal Cloud Foundry (PCF), Amazon Web Services (AWS)
SDLC : Agile, extreme Programming (XP), Test Driven Development (TDD)
CERTIFICATIONS: Angular5, Angular7, React 16, AWS Solutions architect, CCNA Routing and Switching at CISCO Networking Academy, C, C++, JAVA, DTMF based embedded System development.
AWARDS : Outstanding Performance award for timely delivery of Business Center Portal as per client requirements.

Professional Experience

CREOSPAN INC
FULL STACK DEVELOPER (INTERNSHIP) | CHICAGO — **NOV 2018 – MAR 2019**

Project: Design & Development of Employee Portal, USA (Chicago)
Technology: Angular 5+, Spring Boot, HTML, CSS, JavaScript, Bootstrap, React JS, material-UI, MYSQL, PCF
Role: Full Stack Developer
Description:

Designing and developing Employee Portal service that help the company to maintain the employee details, client details and the policies associated with the client. Spring Framework (Spring Boot), JPA with Restful services were implemented to obtain the required information stored in the MYSQL database. The User Interface was developed using Angular5+ and React Js and made use of Rest Services to display content and used material-UI to make the application responsive. Used test-driven development (TDD) as a development practice and followed extreme programming.

Responsibilities:

- Develop RESTful web services, design and implement responsive web pages.
- Build and Deploy the application in Pivotal Cloud Foundry.

INFOSYS LTD
SYSTEM ENGINEER | CHENNAI — **NOV 2015 -- JULY 2017**

Project: AT&T (American Telephone and Telegraph) Corporation, USA (Dallas)
Technology: Angular, HTML5, CCS3, JavaScript, Web Accessibility, Adobe Analytics, Spring Framework.
Role: Full Stack Developer
Description:

Enhancing the Business Center portal for the AT&T users that helps users to purchase new services provided by AT&T Corporation. Technology used it's is a Spring application with Angular as the frontend framework, build using maven and deploy in the server. Following Agile methodology and test-driven development (TDD) approach as development practice.

Responsibilities:

- Worked in setting up data for multiple API's in ICDT server.
- Unit testing for AT&T Business center portal.
- Developing new web pages as per the client requirements.
- Maintaining web accessibility for web pages using NVDA Screen Reader, VAT Toolbar and Fire Eyes software.
- Updating Quality Center. It is a software which offers quality assurance, including requirements management, test management and business process testing for IT and application environments.

ACADEMIC PROJECTS

Shopping Portal (Web Application Development) **(Angular7)**

- Shopping Portal Application is a responsive application developed with angular7 features where a user can login and route to recipes to view all the recipes, recipe details and has the ability to add ingredients for the recipe to the shopping list. The user also has a shopping list view where he can view all the Ingredients added to the cart and proceed to the payment.

Smart Portable (Web Application Development) **(Java, JavaScript, Ajax, Servlets, Twitter, MySQL, Mongo DB, Data Analytics)**

- Smart portable Application is used to help users to buy smart devices and assists the admin with various data analytics functionalities. Tomcat server used to start the application, MYSQL server used to store the logins, products and the orders, Mongo DB server to store the reviews and assist in trending, Data Analytics features, Twitter server to provide Best Deal matches offers and Carousel feature to assist users with recommendations to the products in the cart.

Document Similarity **(R, Data Mining Techniques)**

- Finding users who have watched similar movies form a set of 671 user documents containing User ID, Movie ID, Title and Genre using Shingling, Min Hashing and Locality Sensitive Hashing techniques.

Review Rating Prediction (Recommender System) **(R, Data Mining Techniques)**

- Recommending movies to users and predicting the ratings of a movie corresponding to a user based on user preference or similar users who have rated the movie.
- Dataset used consists of 671 users and 9126 movies. Recommendation system predicts ratings based on User-User similarity, Item-Item similarity and Cosine similarity techniques.

Image Classification (Deep Learning) **(Python, Google Colab, Neural Networks)**

- Designed models using SVM, KNN, Neutral Networks and Transfer learning technologies with the training set and obtained good F1 score of 80% on the test set using Neural Networks Technology. The F1 score obtained was based on classifying Bush/Williams images from a set of images.

Tera sort Implementation using Shared memory, Hadoop, Spark **(Java, Linux)**

- It involves implementation of tera sort in three ways on dataset generated using gensort. The implementation of sorting done using in-memory external merge sort, Hadoop and Spark framework are compared for efficiency which is measured with respect to execution time and throughput. Validation of the sorted result is done on the Chameleon cluster.

Implementation of System Calls and Performing Address Translation: **(C, Linux)**

- This project involves implementation of process state, malloc, free, lseek system calls and address translation from a given virtual address to physical address in a multi-level page table of xv6 architecture. We implemented this project successfully in C and verification was done using GDB debugger.

Implementation of Kruskal's and Prim's algorithm:

- As part of the curriculum, we implemented Kruskal's and Prim's algorithm to find the minimum spanning tree in a given network topology. We implemented this algorithm in java and were successful in providing GUI.