Santhosh Natarajappa

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EDUCATION

School of Computing, University of Utah, MS in Computer Science [4.00/4.00 GPA] 12/2022

B.M.S College of Engineering, Visvesvaraya Technological University, B.E in Mechanical Engineering [9.30/10.00 GPA] 05/2016

TECHNICAL SKILLS

Languages and Frameworks: Java, C#, Python, C++, HTML, CSS, JavaScript, TypeScript, ReactJS, AngularJS, NodeJS, SCSS, ASP .NET Core MVC, Bootstrap, jQuery, Elasticsearch, GraphQL, SQL, Spring, Mockito, Maven, Hazelcast, Cassandra, Kafka.

Libraries: Pandas, Matplotlib, Java 8 Streams, Jackson JSON.

Tools: Git, SVN, VS Code, Visual Studio, Eclipse, Jenkins, CI/CD Pipeline, Postman, JIRA, Confluence.

TECHNICAL EXPERIENCE

Senior Technical Consultant, Blue Yonder (Yantriks). 08/2020 – 08/2021

- Improved order capture efficiency through call center by **10%** by developing the Dojo toolkit's web application.
- Refactored existing code to follow better coding practices and documented the functionalities for future use.
- Contributed to adding **5** new clients by developing a demo application using Shopify, jQuery, HTML, and JavaScript.

Senior Associate Technology, Publicis Sapient (Expicient Inc.). 07/2016 – 08/2020

- Migrated **millions** of e-commerce orders to the modern system by developing multi-threaded Java application using PL/SQL.
- Implemented an order management system by designing and developing RESTful web services using Java and GraphQL.
- Written unit test cases using Junit and Mockito and managed the OMS team to deliver the project in agile mode.
- Improved store user experience by adding signature capture functionality using AngularJS, SCSS, Bootstrap, and gulp.
- Increased store order fulfillment efficiency by **20%** by developing the Dojo toolkit's order capture functionality.

PROJECTS

Interactive Computer Graphics, Rendering on the GPU 01/2022 – Present

- Rendered real-time graphics using the OpenGL API, C++, GLFW, and GLSL.
- Implemented shading, textures, render to buffer, shadows, and reflection by writing complex GPU shaders.

Visualization for Scientific Data 01/2022 – Present

- Visualized scientific data using Python, Matplotlib, pandas, and Plotly.
- Visualized and analyzed 3D MRI images using the ParaView visualization system built upon the Visualization Toolkit (vtk).

Search Engine – Travel Made Easy 08/2021 – 12/2021

- Designed and developed a search engine using Elasticsearch to retrieve local places' information.
- The dataset consisting of more than **100k** documents is prepared and indexed by crawling the web using Selenium.
- Implemented three retrieval models - BM25, Language model (LM) with JM, and Dirichlet smoothing.
- The models are evaluated by labeling **200** query-document pairs and found that LM with Dirichlet smoothing outperformed with **56.6%** precision.
- The web application is created for demonstration using React and served through ASP .NET Web API.

Teaching Assistant Application Portal 08/2021 – 12/2021

- Designed and developed web application using HTML, CSS, Bootstrap, JavaScript, and AJAX in the client browser; application programs are written in C# ASP NET Core running on the server-side; and SQL databases on the back end.
- Configured authentication and identity features and developed single sign-on and role-based accessibility.
- Deployed the application on the Amazon EC2 server.

LEADERSHIP / VOLUNTEERING EXPERIENCE

Teacher – eVidyaloka Trust (NGO) 05/2020 – 05/2021

- Taught science and mathematics for rural, government primary school children.

Mentor – Parikrama Humanity Foundation (NGO) 03/2018 – 08/2018

- Taught basic programming for high school students using Scratch and guided them to create a game.

HONORS AND AWARDS

Promising Newcomer, CARE Awards – Publicis Sapient 12/2016