# Santhosh Natarajappa

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#### **EDUCATION**

School of Computing, University of Utah, MS in Computer Science [3.98/4.00 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, Redux, AngularJS, NodeJS, SCSS, ASP .NET Core MVC, Bootstrap, Material UI, jQuery, GraphQL, SQL.

 $\textbf{Libraries and Technologies:} \ \textbf{NumPy, Pandas, Matplotlib, Plotly, D3, Elasticsearch, Mongo, Spring, Hazelcast, Cassandra, Kafka. \\$ 

Tools: Docker, Kubernetes, AWS S3, API Gateway, Lambda, Git, SVN, VS Code, Visual Studio, Eclipse, Jenkins, CI/CD Pipeline.

#### **TECHNICAL EXPERIENCE**

# Software Engineer Intern, Domo Inc.

05/2022 - Present

- Designed the best tech solutions to solve business problems by producing conceptual and component-level architectures.
- Designed and developed robust enterprise web applications utilizing Figma, TypeScript, Material UI and React-Redux.

# Senior Technical Consultant, Blue Yonder (Yantriks).

08/2020 - 08/2021

- Improved order capture efficiency through the 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 applications using PL/SQL.
- Implemented an order management system by designing and developing RESTful web services using Java, Spring Boot and GraphQL and 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**

#### **Visualization for Data Science**

06/2022 - Present

Designed and implemented web-based visualizations for complex datasets using HTML, CSS, JavaScript, SVG and D3.js

# Interactive Computer Graphics, Rendering on the GPU

01/2022 - 05/2022

- Rendered real-time graphics using the OpenGL API, C++, and GLSL and demonstrated understanding of graphics pipeline.
- Implemented shading, textures, render to buffer, shadows, reflection, physically based rendering and image-based lighting by writing complex GPU shaders.

# **Designing Video Conference Applications to Hold TAs Office Hours**

01/2022 - 05/2022

- As part of the Advanced HCl course, I researched video conference applications from Psychology, Design, Cognition, and Computer Science perspective to improve UX for the TAs office hours.
- Used contextual inquiry and prototype design research methods, and the findings are documented as a paper.

# 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.
- 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 applications 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, developed single sign-on and role-based accessibility, and deployed on the Amazon EC2 server.

# LEADERSHIP / VOLUNTEERING EXPERIENCE

Teacher - eVidyaloka Trust (NGO)

05/2020 - 05/2021

Mentor – Parikrama Humanity Foundation (NGO)

03/2018 - 08/2018

## **HONORS AND AWARDS**

Promising Newcomer, CARE Awards – Publicis Sapient

12/2016