

Spurthy Mutturaj

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EDUCATION

Master of Science in Information Technology

Jan 2022 – Dec 2023

Arizona State University, Tempe.

GPA (4.0 /4.0)

Relevant Courses: Adv. DBMS, Data Visualization, Big Data Analysis, Machine Learning, Data Structures & Algorithms, Object Oriented Programming, Cloud Architecture (AWS), Software Engineering – Agile methodology.

SKILLS

Languages: Python, C++, Adobe ColdFusion Markup Language(CFML).

Tools/Frameworks: Tableau (BI), Excel, Spark, ETL, GitHub, Git, Data Bricks, Pandas, Bokeh.

Database: MongoDB(NoSQL), MySQL, MS SQL Server.

PROFESSIONAL EXPERIENCE

Arizona State University, Tempe, AZ: *Software Developer*

Mar 2022 – Dec 2023

- Migrated a record keeping site, based on jqGrid and Select2 UI to DataTables and Fomantic UI for enhanced UX.
- Identified & fixed bugs introduced during the migration and development process leading to a more stable release.
- Developed a real-time contact management system gathering data from 30+ applications.
- Optimized server storage by 5% by eliminating unused code in 50+ apps (used by 20,000+ users).
- Accomplished 80% surge in user engagement (Google Analytics) through consistent content updates and marketing.

Tools: JavaScript, jQuery, AJAX, JSON, WordPress, Git.

UXL Technology Academy, Bangalore, India: *Programmer*

Jun 2020 - Oct 2020

- Mentored and instructed high school students at a coding academy, elucidating object-oriented programming (OOPS) concepts and programming paradigms using Python and Java programs.

ACADEMIC PROJECTS

Cloud Infrastructure Design and Deployment using AWS

May 2023

- Comprehensive knowledge of AWS resources through 10+ projects.
- Focused on storage solutions, servers, virtual networking (VPCs & subnets) and security best practices.

Tools: AWS CLI, EC2, S3, RDS, AWS Lambda, Cloud Watch, Cloud Formation, IAM.

Vaccine Management System

May 2022

- Developed a relational database system to allocate vaccines based on 3 age groups.
- Formulated 10+ queries, triggers, stored procedures, user-defined functions to analyze statistics.

Tools: SQL, SQL Server Management Studio, Relational Database, ER diagrams.

Visualizations for Cardiovascular Health

Apr 2022

- Created 10 Tableau visualizations, i.e Line & Bar charts, and Scatter plots, to reveal key insights into heart disease trends.
- Designed an interactive dashboard enabling users to filter data based on age categories, sleep time, physical activity etc.

Tools: Tableau, Kaggle Data set, Mural, GitHub.

ML Pipeline in Spark ML

Mar 2022

- Implemented a Spark ML pipeline to perform model training conduct, cross-validation, optimizing decision tree classifiers with varied parameters for superior results.
- Explored varying impurity measures and different max depth values, observing their impact on test errors.

Tools: Tableau, Kaggle Data set, Mural, GitHub.

Restaurant Recommendation System

Jun 2021

- Built a personalized engine using NLP & Gensim to suggest restaurants to users, utilizing yelp dataset of 500+ profiles.
- Used Cosine Similarity to match user profile against all the business profiles, providing a score between 0 to 1.
- Published international research paper (at IJIEEB) exploring 4 to 5 different recommendation techniques.

(<http://www.mecs-press.org/ijieeb/ijieeb-v13-n3/v13n3-3.html>, <https://youtube.com/@spurthym>).