Joshua Dunkley

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Education

MIDDLE TENNESSEE STATE UNIVERSITY   Murfreesboro, TN
M.S., Computer Science. 4.00   May 2022
Relevant Coursework: Software Engineering, Intro to AI, Deep Learning, Analysis of Algorithms, Database Management Systems, Database Security, Data Mining, Cloud Computing Data Analysis, Data Understanding

UNIVERSITY OF TENNESSEE, KNOXVILLE   Knoxville, TN
B.S., Computer Science. 3.94   May 2020
Relevant Coursework: Software Engineering, Systems Programming, Programming Languages & Systems, Intro to Machine Learning, Databases & Scripting Languages, Matrix Algebra, Data Structures and Algorithms, Operating Systems

Experience

ANTAGE, INC.   Brentwood, TN
Full-Stack Software Developer   May 2022 – Present
I create full-stack solutions using Angular and the AWS CDK. I researched, designed, and developed our API code base to use the AWS CDK stack to allow for more maintainable code. I developed automation scripts in Python to deploy our website and API.

MIDDLE TENNESSEE STATE UNIVERSITY   Murfreesboro, TN
Graduate Teaching Assistant   Jan 2021 – May 2022
Assists professor in Systems Programming course through grading of student projects and re-teaching of systems concepts taught in class.

Research

UNIVERSITY OF TENNESSEE   Knoxville, TN
Undergraduate Researcher   Aug 2019 – Mar 2020
Implemented a GUI using Qt and Python to visualize and process real-time time-series data with application to brain-computer interfaces. Created a signal processing tool to allow users to apply low-pass, high-pass, and band-pass filters on real-time time-series data.

Projects

ASSET MANAGEMENT SYSTEM - CAPSTONE
Created an Angular/Node.js application in the cloud that tracked and maintained a record of company assets. Designed the MySQL database schema on an EC2 instance, created lambda functions in TypeScript, and created a web API with an HTTP endpoint for lambda functions by using AWS API Gateway. Gained experience with the AWS CDK, Docker, CI/CD practices, and GitLab.

PATH PLANNING VISUALIZATION
Created an application using PyGame that allows users to visualize two path planning algorithms: A* and wavefront. Implemented an interactive environment that allows users to add obstacles to a world grid to visualize how path planning works under various constraints.

Leadership & Activities

CAPSTONE PROJECT   Murfreesboro, TN
Team Lead   Aug 2021 – Dec 2021
Organized and led group meetings, logged team discussions and decisions, communicated with business clients to keep track of business requirements, and delegated tasks to teammates.

Skills & Interests

Skills: Python (Numpy, Keras, Pandas), Angular, SQL (MySQL, MSSQL), AWS, Git, CI/CD
Soft Skills: Effective communicator, critical thinker, problem-solver, open-mindedness and adaptability, teamwork
Interests: Jigsaw puzzles, Crosswords, Reading, Board/Card games, Cooking, Hiking, Machine/Deep Learning