Andrew Nguyen

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Education

University of Houston, Houston, TX

Bachelor of Science, Computer Science **May 2025**

Certifications: AWS Certified Solutions Architect – Associate (SAA-C03)

Skills

Programming Languages: Python, C++, HTML, CSS, JavaScript, SQL, PHP

Developer Tools: Git, Visual Studio Code, PyCharm, MongoDB Compass, DBeaver, Jupyter Notebook

Frameworks/Libraries: React.js, Node.js, Express.js, Tailwind CSS, Bootstrap, jQuery, TensorFlow

Databases: MongoDB, MySQL

Professional Experience

University of Houston, Houston, TX

IT Customer Support **August 2021 – September 2023; February 2025 - Present**

- Troubleshot and resolved over 500 software and hardware issues for over 50,000 university students and staff.
- Guided over 100 clients and colleagues weekly through step-by-step technical solutions, reducing repeat incidents by 15% by proactively implementing measures to prevent recurring issues, enhancing customer satisfaction.
- Collected, cleaned, and analyzed customer data to identify common technical issues and recurring service trends, improving service efficiency by 10% by delivering insights in reports.

Projects

Military Aircraft Detection Model

Python, TensorFlow **October 2024 – November 2024**

- Led a team of 4 in the development of a Convolutional Neural Network model using Python and TensorFlow, feeding over 50000 images of 70+ aircraft into ResNet50 and EfficientNetV2-B0 architectures to achieve accurate identification and classification.
- Implemented a data preprocessing workflow for optimal training which included image resizing, normalization, and augmentation to enhance model performance and generalization, resulting in a 94% accuracy using Sparse Categorical Cross Entropy.
- Coordinated task assignments, streamlined data pipeline, and provided guidance on CNN architecture and hyperparameter tuning, optimizing ResNet50 and EfficientNetV2-B0 implementations for improved precision and reliability across multiple aircraft types.

Voluntify

React.js, Express.js, Node.js, MongoDB **September 2024 – November 2024**

- Led a team of 2 in the development of a full-stack web application enabling 100+ users to sign up for and track events based on preferences, with CRUD functionality for managing user accounts, event data, and administrative tasks.
- Designed and developed the backend using MongoDB, Express.js, and Node.js, using RESTful APIs to perform CRUD operations for user authentication, event tracking, personalized recommendations, and administrator functionalities.
- Implemented Agile methodologies, reducing development cycle times by 20% and ensuring the timely delivery of project goals.

Runaway

Express.js, Node.js, OpenAI GPT API, Amadeus API **February 2024**

- Developed a backend for a full-stack web application enabling users to search and compare flights and accommodations through natural-language queries, using the OpenAI GPT API for conversational recommendations.
- Utilized the Amadeus API with Express.js and Node.js to deliver real-time travel data, building RESTful endpoints for query handling, data aggregation, and intelligent responses.
- Contributed to building a React frontend with an intuitive interface, using Agile methodologies to track project goals.

Extracurricular Activities

Society of Asian Scientists and Engineers, Media Team Member **January 2025 – May 2025**

- Captured and edited photos for 15+ events, boosting social media engagement and documenting key milestones to enhance branding and foster community connection.

Independent Photographer, Freelance **November 2023 - Present**

- Delivered event and portrait photography services, managing clients, editing images, and oversaw business operations.

After School Stem Coders, Moderator **August 2020 – August 2021**

- Co-founded UH's largest CS society (900+ members), supporting students with professional development and networking opportunities during remote/hybrid learning.