DEYUAN YANG

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EDUCATION

Washington University in St. Louis, St. Louis, MO GPA: 3.7/4.0

Bachelor of Science & Master of Science in Computer Science

DePauw University, Greencastle, IN GPA: 4.0/4.0

Bachelor of Arts in Pre-Engineering and Mathematics

August 2023 – May 2026

Expected Graduation May 2026

August 2020 – May 2023 Degree Conferral Expected May 2026

TECHNICAL SKILLS

Languages & Frameworks: Python, C++, Java, C#, Go, SQL, MySQL, PHP, HTML, CSS, JavaScript, TypeScript, R, Ruby, SML, Racket, Swift; React, Next.js, Express.js, Node.js, Django, FastAPI, TensorFlow, Pandas, LangChain, AutoGPT, Shiny, Socket.IO

Cloud & DevOps: AWS, Google Cloud, Azure, Docker, Kubernetes, Git, GitHub, Bitbucket, Linux, Bash, Apache, CI/CD, SSH

Databases: PostgreSOL, MySOL, MongoDB, DynamoDB, SOL Server, CosmosDB, Firestore, Oracle

AI, Data & Blockchain: Machine Learning, Deep Learning, LLMs, RAG, AI Agent Frameworks, Decentralized Systems, Smart Contracts, Starknet, Ethereum

Development & Tools: Full-stack web and mobile development, Shopify, HTML/CSS, AJAX, JSON, REST APIs, Express.js, SEO optimization, Web Application Security, Real-time applications, Rapid prototyping, Unity, Unreal Engine, Visual Studio Code, Google Analytics, SEO Monitoring Tools, A/B Testing, Performance Optimization

Relevant Coursework: Data Structures (TA), Object-Oriented Programming, Web Development, System Software (TA), Analysis of Algorithms, Artificial Intelligence, Machine Learning, Deep Neural Networks, Cryptography, Systems Security, Data Mining (TA), Mobile App Development, Rapid Prototyping, Software Engineering, Quantum Computing, Privacy & Security, Video Game Development I & II, Nonlinear Optimization, Programming Languages, Probability & Statistics, Graph Theory, Linear Algebra, Applied Math, Mathematical Analysis

Certifications: Microsoft Azure AI Fundamentals Certificate (Earned 2024)

WORK EXPERIENCE

Web Developer & Designer — Sustain-a-Plate

June 2024 – August 2024

• Built a responsive full-stack inventory management app (**React/FastAPI/PostgreSOL**) with real-time analytics and **Figma**-designed responsive UI.

Full Stack Developer — SendBack

April 2024 – August 2024

- Developed and deployed a scalable returns management system using **React**, **FastAPI** and **AWS**.
- Managed storage via **S3** and used **DynamoDB** for NOSQL database handling.
- Leveraged **RESTful APIs** and deployed using **Elastic Beanstalk** for high availability.

Mobile App Developer — ShopNFind

May 2024 – June 2024

• Created **React Native** app for in-store navigation with real-time inventory updates and cross-platform optimization.

Security and Quality Analyst — LINUXJOBBER, Greenbelt, MD

May 2022 – Aug 2022

- Developed a <u>**Django**</u>-based platform, enhancing visual design and improving system uptime.
- Conducted QA for educational content, ensuring accuracy across features and documentation.

PROJECTS

Seasonal Trade-Up Platform - CSE 437 Software Engineering Workshop

Spring 2024

• Full-stack e-commerce platform with eBay API integration, Docker/Kubernetes deployment, and CI/CD pipelines.

Job Match Platform — CSE503 Rapid Prototype Development and Creative Programming

Spring 2024

• Built a **Django** web app with resume parser, smart job/candidate recommendations, real-time messaging and analytics.

No-Code Portfolio Generator — CSE 204 Web Development

Spring 2024

• Designed a beginner-friendly web app using HTML, CSS, and JavaScript that transforms uploaded resumes (PDF/image) into customizable portfolios; Implemented theme/template selection and HTML export link sharing.

Element - Shopify UI/UX and SEO Optimization

Fall 2024

• Enhanced e-commerce site <u>UI/UX</u> and <u>SEO</u> using <u>Shopify</u> and <u>Google Analytics</u>, improving traffic and conversion rates.

D10: AI Agent GUI for Architectural Drawing Object Detection Spring 2024

• Fine-tuned LLMs and built a frontend interface for AI object detection on architectural plans, improving user interaction and feedback.

Brain Battle - Real-time SAT Prep Game (React Native)

Fall 2023

• Created a multiplayer **React Native** quiz app for SAT prep; led UI/UX design with responsive animations and scoring logic.

Engineered a GPT-4 powered backend for autonomous ad copy and character animation using Streamlit and Adobe Creative Suite.

Agent-Based Advertisement Generator – Underground Dojo

Oct 2023 - March 2024

Cache Memory Lab –CSE361S: Intro to System Software

• Implemented a C-based matrix transpose simulator to optimize cache usage and minimize misses. File System Simulation – CSE332S: Object-Oriented Programming

Fall 2023

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• Developed a command-line file system in C++ with core commands and design patterns to ensure modular, testable code.

WhoFundedIt - AI-Powered Research Tool

May 2023 – August 2023

• Designed and built a web app using **NLP** and **AI** to extract and summarize funding sources from academic papers.

• Automated backend data processing pipelines for scalable research data ingestion.

Cybersickness Mitigation in Virtual Reality

May 2022 – August 2022

• Conducted research to mitigate cybersickness in VR, using <u>Unreal Engine</u> and <u>Arduino</u> for data capture, and developed a **3D-printed** chin rest to stabilize participants, demonstrating hands-on experience with complex systems.