

## EDUCATION

**The University of Texas at Dallas** - *B.S. Computer Information Systems and Technology*

**December 2024**

**Honors:** Davidson Management Honors Program

**Scholarships:** *Expedition EY Scholarship*

## EXPERIENCE

**Huron Consulting Group** - *Digital Consulting - Analyst*

**January 2025 - Present**

- Design and develop enterprise applications using Workday Extend platform, building full-stack solutions with custom UI components, backend business logic, and database integrations to automate business processes for university and healthcare clients.
- Contributed to development and ongoing maintenance of Time Tracking Solution for Internal Projects, a production-grade Workday Extend application published on Workday Marketplace serving enterprise clients ([View App on Workday Marketplace](#)).
- Engineered automated reporting system using Power Automate and LLM integration that orchestrates data from multiple Smartsheet sources, performs ETL operations, generates AI-powered summaries of meeting notes and action items, and delivers automated reports—eliminating 1,500+ hours of manual work weekly.
- Build automated data transformation pipelines that convert XML to JSON, implement data validation and cleaning logic, and integrate with RESTful APIs for system-to-system data exchange, processing 560GB weekly across 5 integrations
- Develop XSLT transformations and custom integration logic using SQL/WQL for data extraction, field mapping, and business rule implementation across enterprise systems

**Huron Consulting Group** - *Digital Consulting - Intern*

**May 2024 - August 2024**

- Engineered a student scheduling application using advanced backtracking algorithms and Workday Extend, implementing real-time course enrollment data integration and constraint-solving logic—application was subsequently purchased and deployed by two major universities

**PwC** - *Start Consulting Intern*

**May 2023 - August 2023**

- Built interactive dashboards and data visualization tools using Tableau, PowerBI, and Alteryx, implementing automated ETL pipelines that reduced manual data processing time by 60% and enabled real-time reporting for nonprofit strategic planning
- Performed data analysis using SQL and Python to extract insights from large datasets, identifying demographic gaps and informing data-driven recommendations for educational access initiatives

## Technical Projects

**NutriOne** - *Full-Stack Nutrition Tracking Application*

- Built a production-ready nutrition tracking application using FastAPI, PostgreSQL, React, and TypeScript with comprehensive backend architecture including user authentication, RESTful API design, and database schema optimization
- Engineered custom YOLOv8 computer vision models for automated food detection and classification, training models on Food-101 dataset using PyTorch and achieving significant accuracy improvements over baseline approaches
- Designed modular backend architecture with 21 organized service modules, implementing separation of concerns with dedicated modules for authentication, nutrition data, water tracking, and meal logging functionality
- Designed ETL pipelines integrating USDA FoodData Central and Open Food Facts databases, transforming and normalizing nutritional data into unified PostgreSQL schema supporting real-time meal analysis

**Automated Plant Health Monitoring System** - *IoT ML Pipeline with Computer Vision*

- Built end-to-end IoT data pipeline using 3 ESP32 microcontrollers and ESP32-CAM module, processing 288+ daily sensor readings from 9 sensors (soil moisture, temperature, humidity, light) and streaming data to FastAPI backend with TimescaleDB for time-series analysis
- Developed computer vision system using OpenCV to segment and analyze 3 individual plants from single shared camera feed, extracting health metrics including green/stress ratios, growth tracking, and chlorosis detection—reducing hardware costs by 67% while maintaining per-plant accuracy
- Engineered and deployed multiple ML models including Random Forest for plant health classification, LSTM neural networks for soil moisture forecasting, and ensemble models for watering recommendations, achieving accurate predictions across different plant species
- Architected containerized microservices infrastructure on Proxmox with Docker, implementing async FastAPI endpoints, TimescaleDB optimization with hypertables, and React dashboard with real-time WebSocket updates for live sensor visualization
- Programmed ESP32 microcontrollers with I2C multiplexer implementation for managing 9 sensors across single bus, handling sensor calibration, WiFi transmission protocols, and error recovery logic for reliable data acquisition

**Home Lab Infrastructure** - *Self-Hosted Services & Container Orchestration*

- Designed and manage self-hosted infrastructure using Proxmox virtualization platform, orchestrating 6 containerized services including 2 PostgreSQL databases, 2 FastAPI applications, Tailscale VPN, PiHole DNS, and Jellyfin media server
- Implemented containerization using Docker and LXC containers, managing service networking, persistent storage, and system monitoring across distributed services in a home lab environment

## Leadership & Project Management

**180 Degrees Consulting at UT Dallas** - *President*

**May 2024 - December 2024**

- Managed team of 7 directors across project delivery, client relations, and operations, setting strategic direction and ensuring organizational alignment with goals while overseeing delivery of 15+ consulting projects for companies across profitability analysis, revenue generation strategies, and marketing optimization.
- Implemented systematic process improvements that increased project throughput by 10% semester-over-semester through enhanced team coordination, resource allocation optimization, and standardized project management methodologies across all consulting engagements

## Technical Skills

**Languages:** Python, JavaScript, TypeScript, Java, SQL, CSS, HTML

**Frontend:** React, TypeScript, Astro, Tailwind CSS, HTML/CSS

**Backend:** FastAPI, Django, Flask, Node.js, RESTful API design, PostgreSQL, SQL Server

**AI/ML:** PyTorch, YOLOv8, LLM integration, Computer Vision, Model training and deployment

**DevOps & Tools:** Docker, Git, Proxmox, LXC containers, Linux (Arch, Ubuntu), Bash scripting

**Platforms:** Workday Extend (Certified), Workday Integrations (Certified), ServiceNow, Power Automate, Supabase

**Data & Analytics:** SQL, PostgreSQL, Tableau, PowerBI, Alteryx, ETL pipelines