Seth DeWhitt

Seattle, WA | sethjtdewhitt@gmail.com | sdewhitt.com | linkedin.com/in/seth-dewhitt | github.com/sdewhitt

EDUCATION

Purdue University — West Lafayette, IN
Bachelor of Science in Computer Science, Software Engineering concentration — *Aug. 2023 – May 2027*
Relevant Coursework: Data Structures, Analysis of Algorithms, Discrete Mathematics, Systems Programming, Computer Architecture, C Programming, Software Testing, Object-Oriented Programming, Linear Algebra
Activities: Purdue Jazz Education Network (President), Purdue Jazz Band (Lead Tenor Sax.)
Awards: Elmhurst University Jazz Festival Outstanding Soloist (2x), Dean's List

EXPERIENCE

Technical Project Manager & Teaching Assistant — Aug. 2025 – Present
The Data Mine, Purdue University — *West Lafayette, IN*
- Directing a team of 11 students in collaboration with the Practical AI Podcast (PAI) and Prediction Guard
- Managing implementation of a RAG chatbot with vector search to link responses to episode transcripts/timestamps
- Leading design of full-stack podcast generation app using user-uploads and voice clone models trained on PAI hosts
- Planning/Leading biweekly Agile sprints, coordinating tasks and progress reviews across a 50k+ line codebase

Software Engineering Intern — June 2025 – Aug. 2025
Chewy — *Bellevue, WA*
- Developed a service for launching JupyterLab sessions loaded with custom tooling and configurable compute specs, extending an internal web app using **React, TypeScript, Python, FastAPI, Docker**, and Okta SSO auth
- Streamlined workflows for 15 data scientists via on-demand **AWS ECS** compute infrastructure using **boto3**
- Enhanced user experience by implementing a paginated and searchable JupyterLab session management table
- Enabled secure persistent file storage across JupyterLab sessions by mounting **AWS EFS** to ECS tasks
- Deployed an **AWS Lambda** to periodically trigger backend clean-up via **AWS Kinesis**, using **psycopg2**, boto3, and EFS mounts to prune ECS tasks, clean **PostgreSQL** records, and enforce EFS file retention policies
- Built application and AWS Infrastructure as Code (IaC) using **Terraform** and a **Jenkins** CI/CD pipeline

Software Engineering Intern — May 2024 – Aug. 2024
The Online Marketplace Partnership (OMP) — *Remote*
- Integrated sales/advertising data from 5+ e-commerce platforms and 12+ databases into a unified KPI dashboard
- Connected disparate sources including Amazon, Google, Meta, Walmart, Shopify, and WooCommerce
- Enabled OMP experts to analyze data for 11 retail clients, with up to 60 performance metrics for 150 products

Undergraduate Data Science Researcher — Aug. 2023 – May 2025
The Data Mine, Purdue University — *West Lafayette, IN*
- Collaborated with Bayer Crop Sciences to model future impact of climate change on corn yields, helping Bayer farming clients plan future adaptation strategies (2023-2024)
- Optimized a **LightGBM** model for large-scale genomic datasets through hyperparameter tuning and cross-validation, improving Pearson correlation and reducing RMSE
- Integrated machine learning models with GxExM to predict product placement for Syngenta (2024-2025)
- Implemented data preprocessing pipelines for quality control, including filtering genetic markers and normalizing phenotypic outliers using mixed linear models

PROJECTS

MyPort | *TypeScript, React, Next.js, OpenAI, LangChain, Supabase* | GitHub Link — Oct. 2025
- Pioneered RAG chatbot to answer portfolio questions via Supabase, OpenAI embeddings, and LangChain retrievers
- Built automated ingestion pipeline to chunk portfolio data and autosync, supporting idempotent updates/backfills

Evallm | *TypeScript, React, Next.js, Vercel, OAuth2, MongoDB* | GitHub Link — July 2025 – Aug. 2025
- Developed full-stack app deployed on Vercel using Groq API to evaluate user-prompted Meta LLM responses
- Implemented analytics dashboard with prompt analysis, LLM stats, and experiment tracking for model comparison
- Built responsive UI with real-time insights and Google authentication to enhance user experience

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, Java, C#, C/C++, SQL, HTML/CSS, R
Cloud/Data: AWS, boto3, psycopg2, PostgreSQL, NoSQL, Pandas, Flyway, Supabase
Dev Tools: Git, FastAPI, React, Node.js, Next.js, Vite, Tailwind, Docker, Pinecone, MongoDB, Terraform, Jenkins