MATTHEW BRUMMUND

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EDUCATION

BS, Computer Systems Engineering (CSE)

Expected May 2026

- Arizona State University, Ira A. Fulton & Barrett, The Honors College Tempe, AZ Cumulative GPA: 3.78
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Software Engineering Principles

SKILLS

Programming Languages/Software

- Python, Java, Rust, C/C++, JavaScript/TypeScript, HTML/CSS, React, Next.js, SQL, Terraform (HCL)
- AWS CDK/SDK, Docker, Git/GitHub, Linux CLI, CI/CD (GitHub Actions, AWS CodePipeline), Agile/Scrum

AWS Services

- Bedrock, Lambda, EC2, S3, DynamoDB, API Gateway (REST/WebSocket), CloudFront, OpenSearch, Redshift
- IAM, CloudWatch, VPC, CloudFormation, EventBridge, ECS/Fargate, Secrets Manager, CodeBuild/CodeDeploy

EXPERIENCE

AWS AI Cloud Innovation Center, Associate Cloud Developer

Apr 2024 - Present

- Delivered 5 full-stack AI-enabled cloud solutions for enterprise and government clients including: The State of New Jersey, Chandler Police Department, Orthodox Union, ASU Enterprise Technology, Ohio State University
- <u>ASU Enterprise Technology</u> Architected conversational AI system for institutional data using Bedrock Knowledge Bases with Redshift integration and Nova Pro, eliminating SQL expertise requirement for staff data queries
- <u>Chandler Police Department</u> Delivered custom-built AI-powered traffic complaint portal, internal dashboard for officers with heatmap visualizations, and integrated Amazon Lex chatbot
- Orthodox Union Created RAG chatbot processing hundreds of hours of multilingual Torah lectures using Bedrock, OpenSearch, and custom Transcribe for Hebrew/Aramaic with timestamp citations
- Leveraged AWS cloud services to build full-stack applications with: IAC (Infrastructure as code), backend development focused on API's, and frontend deployments build with React, NextJs, Angular, and Streamlit
- Collaborated on projects in a team setting designed around rapid prototyping Followed Scrum principles including weekly sprints towards client meetings, and daily standup meetings Effectively communicated with clients on projects

DORA Satellite (Deployable Optical Receiver Aperture)

Launched Fall 2024

- Developed Rust functions for DORA (Deployable Optical Receiver Aperture) a 3U CubeSat fielded by the LoCo Lab at ASU Launched to orbit fall 2024
- Wrote various Rust functions to support critical information retrieval (reading sensors, and selective telemetry return)
- Handled error checking for edge cases in commands in a zero-fault-tolerant setting, as well as general debugging

SPEAKING & RECOGNITION

12 News (Phoenix), Chandler PD Portal Featured Technology Expert

Sept 2025

• Featured in news segment showcasing AI-powered traffic complaint system built for Chandler Police Department

AWS Imagine 2024, Panel Speaker

July 2024

• Panelist for "AIM107: Building Positive Futures: The Adoption of Generative AI from Student and Higher Education Perspectives" alongside ASU leadership and AWS professionals