

Blake Dutton

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EDUCATION

Arizona State University

Expected May 2029

Bachelor of Science in Technological Entrepreneurship and Management

Mesa Community College

May 2025

Dual Enrollment Coursework

Mountain View High School

May 2025

3.9 GPA

WORK EXPERIENCE

Information Systems Aide

Arizona State University

December 2025 - Present

- Implemented automated data pipeline to transform messy reconciliation spreadsheets into structured dataset
- Designed, developed, and deployed Looker dashboard used by program leadership for financial insights
- Cleaned, validated, and standardized multi-source, user-generated data for integration into Airtable

Next Education Workforce Innovative Tools Development Assistant

Arizona State University

July 2025 - December 2025

- Built AI-assisted chatbot to navigate Next Education Workforce website
- Structured site content into organized resource maps to support retrieval workflows
- Designed prompt flows to improve relevance of responses based on user queries
- Conducted analysis of LLM outputs across models to evaluate consistency in educational contexts

Career and Technical Education Intern

Mesa Public Schools

August 2024 - June 2025

- Designed and implemented data structures for integration into MongoDB resource storage
- Researched and utilized tools such as React, Docker, and Flask to develop production-ready websites and dashboards
- Collaborated with student career advisors as stakeholders to develop the platform to track and monitor their pain points
- Created interactive LookerStudio dashboards to visualize EdProfession student participation with real-time insights into student engagement

RELEVANT PROJECTS

Learnline

AI-powered platform that generates structured assignments from teacher input based on real standards and educational frameworks.

- Built full-stack system using React, Flask, and PostgreSQL
- Designed LLM prompt pipeline (OpenAI API) to generate structured lesson content
- Implemented user authentication, admin dashboards, and usage analytics
- Developed backend workflows for formatting and validating AI-generated outputs
- Containerized application and deployed via Render with custom domain configuration
- Authored 20-page technical and business paper; qualified for DECA international competition (26,000+ participants)

Teacher Resource Network

In development platform for retrieving and ranking relevant educational resources based on semantic queries.

- Building full-stack system with jQuery, Flask, and PostgreSQL
- Developing ingestion pipeline for indexing web and document-based resources
- Implementing semantic search using vector embeddings and similarity comparisons
- Designing LLM-based classification pipeline for standards alignment
- Applying keyword extraction (YAKE) to enhance search relevance

RELEVANT SKILLS

Languages & Data

- Python, JavaScript (TypeScript), C#, Java
- SQL

AI / ML

- LLM integrations
- Model fine-tuning (LoRA)
- Local model deployment
- Data preprocessing & feature extraction

Systems & Backend

- API Integrations (OpenAI, Twilio, Google APIs)
- Flask, Next.js
- PostgreSQL, MongoDB

Tools

- Docker, Git