

Sara Avila

Omaha, NE 68178

seavila.05@gmail.com | (605) 254 - 2931 | saraeavila.com | linkedin.com/in/saraeavila

EDUCATION

Creighton University, Omaha, NE

2023 - 2027

Bachelor of Science: Computer Science, Data Science; Bachelor of Arts: Spanish and Hispanic Studies

- GPA: 4.00 / 4.00 | Barry Goldwater Scholar | Next Generation Leader Scholar

EXPERIENCE

QA Engineer, Hudl

Lincoln, NE | May 2026 – Present

- Redesigned frontend components for Hudl's new coach experience on an Agile team, supporting **hundreds of thousands of coaches and athletes**.
- Expanded automated test coverage with **unit, integration, and E2E** using **C#, TS/JS, and Python**.
- Investigated code-level failures using application logs and validated releases with **AWS, MongoDB, and Docker/Rancher**.

Software Engineer Intern, Aerostar International

Sioux Falls, SD | May 2025 – Aug. 2025

- Engineered an interactive full-stack simulator for stratospheric balloon launches using **Vue.js, JS/HTML, and Python**, collaborating with engineers to model balloon performance and launch scenarios.
- Used **Docker, Git, debugging, and testing** to support reliable development and validation of simulation software.

Data Science Intern, CARS

Creighton University, NE | August 2024 – Dec. 2025

- Maintained and analyzed program databases using **Microsoft Access, SQL, and Excel**, automating reports and improving data accuracy.

Apple MacBook Technician, Apple

Creighton University, NE | Dec. 2023 – Jan. 2025

- Received Apple MacBook Technician Certification, diagnosing and repairing **Apple hardware and software**, including component replacements, troubleshooting, and system restorations.
- Analyzed repair program data to produce **financial reports and visualizations** supporting operational decision-making

Information Technology Intern, Sioux Falls School District

Sioux Falls, SD | May 2024 – Aug. 2024

- Installed, configured, and troubleshoot hardware and software across the district's infrastructure, diagnosing and resolving system issues to maintain performance and reliability for educational and administrative operations

RESEARCH PROJECTS

AI Undergraduate Researcher

Creighton University, NE | May 2024 – Present

- **SCRIBE (NLP)**: Developed an NLP system for medical school personal statements using **sentence embeddings and BERT-based classifiers** to segment essays, score rubric-aligned content, and detect red-flag content.
- **Cochlear Hair Cell Detection (Computer Vision)**: Trained **YOLOv11** on annotated confocal microscopy images to detect and classify inner and outer hair cells, evaluating performance against expert annotations.

PROJECTS

P3 Myeloma | GoDaddy Airo, Supabase, Hugging Face

2027

- Engineered the patient-facing workflow for an **AI-enhanced medical decision-support platform**, implementing consent, authentication, account verification, and protected chatbot access.
- Integrated the **MyeAI chatbot** with **Supabase-backed participant tracking**, incorporating accessibility, privacy, and usability requirements for pilot deployment.

Polytext | Python, FastAPI, PyTorch, Hugging Face, React/TS, Docker, AWS

2027

- Engineered a multilingual NLP API for **sentiment analysis, NER, language detection, and zero-shot classification** with language-aware model routing and multilingual fallbacks.
- Implemented **authentication, Redis rate limiting, PostgreSQL persistence, load-testing, Docker, CI, and observability**

Human Activity Recognition | Python, C++, NumPy, SciPy, scikit-learn

2027

- Engineered a signal-processing and feature-extraction pipeline from **raw 3-axis accelerometer data**, achieving **86.8% accuracy on unseen subjects**.
- Evaluated accuracy-memory tradeoffs for embedded deployment and ported the inference pipeline to C++ under constrained compute and memory requirements.

SKILLS & CERTIFICATIONS

Programming: Python, C/C++, Java, SQL, R, JavaScript/TypeScript, HTML/CSS, C#

Machine Learning & Data: PyTorch, Hugging Face, Transformers, Scikit-Learn, TensorFlow, Pandas, NumPy

Frameworks & Tools: FastAPI, Vue.js, GraphQL, Docker, Git, GitHub Actions, Playwright

Databases & Cloud: PostgreSQL, MySQL, MongoDB, Redis, AWS, Azure, Supabase

Languages: English (Native), Spanish (Native)