

# Dalia Y. Castro-Fimbres

## Security Clearance: Secret (Active)

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### EDUCATION

#### Bachelor of Science in Software Engineering

May 2025

University of Arizona

Tucson, AZ

- **Major GPA:** 3.89
- **Programing Coursework:** Data Structures & Algorithms, Software & Computer Architecture, DevSecOps
- **Relevant Coursework:** Principles of AI, MITRE Caldera for OT Research, Game Development
- **Organizations:** Defense Civilian Training Corps, and NewFos.

### WORK EXPERIENCE

#### Junior Software Developer Intern

Tucson, AZ

Avirtek

Aug 2024 – December 2024

- Developed a streamlined configuration tool for malware detection software using JavaScript and React, reducing user's configuration time by 40%.
- Full stack engineered and implemented a backend server using Flask with Python to efficiently handle data transfer between the front end and backend
- Collaborated with other software developers to design and document comprehensive user test cases, proactively identified bugs, and delivered efficient solutions to ensure software reliability.
- Leveraged Knowledge in Git, Python, JavaScript, REACT, Material UI, Docker, and Jira

#### Lead Software Engineer Intern

Huntsville, AL

Devcom AvMC Army Game Studio

June 2024 – Aug 2024

- Led a team of four to design and develop a 3D board game in Unity, delivering over 1,000 lines of code within a 6-week timeline
- Implemented gameplay mechanics features such as user interactions, and UI/UX elements to enhance usability and player satisfaction
- Applied Agile methodologies utilizing the software development lifecycle, including developing requirements, task breakdown, backlog management, and iterative development.
- Leveraged knowledge in Git, C# scripting using VSCode, Unity game development, and project management using Jira

### SKILLS, ACTIVITIES & INTERESTS

**Languages:** Bilingual - Fluent in written and spoken Spanish.

**Programming Languages:** Assembly, C, C++, C#, Python, SQL, HTML/CSS, TypeScript, JavaScript, and Java.

**Frameworks and Tools:** React, React Native, Angular, JavaFX, Node.js, Express, Flask, REST API's, EXPO, PostgreSQL, Unity, AWS, Unix/Linux, Windows

**Toolchains & DevOps:** Git, GitHub, GitLab CI/CD, SonarQube ,Docker Jira, Jama

**Development Methodologies:** Agile, SDLC, UML, DevSecOps, Kanban, SCRUM, CI/CD

### RELEVANT PROJECTS

#### NEO-Cath, Interdisciplinary Capstone

- Developed a React Native mobile app (iOS/Android) to visualize and monitor real-time temperature and pH sensor data, with user alerts for abnormal readings.
- Programmed and interfaced with an Arduino microcontroller, enabling serial communication with sensors and backend systems for live data transmission.
- Built a Python backend server to manage sensor data, ensure secure data transfer, and store readings in an AWS RDS MySQL cloud database.

#### Scholarship and Application Management System

- Built a full-stack Scholarship and Application Management System using the MVC architecture with Node.js, Express, PostgreSQL, and React, fully containerized with Docker for local development and deployment.
- Engineered secure backend services with role-based access control, JWT-based authentication, and hashed passwords; developed a robust algorithm to match students to scholarships based on eligibility criteria and academic metrics via RESTful APIs.
- Established a DevSecOps pipeline with GitLab CI/CD, integrating Jest unit tests and SonarQube static analysis to ensure code quality, security, and continuous delivery.