

# DYLAN MONGE

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## EDUCATION

### California State Polytechnic University, Pomona

B.S. Computer Science, Minor in Data Science

3.40 GPA

Pomona, CA

09/2020 - 04/2025

## PROFESSIONAL EXPERIENCE

### Lavner Education

Pomona, CA

#### IT Support Intern & Instructor

06/2025 - Present

- Configured and maintained computer hardware, classroom technology, and internet infrastructure to support daily tech camp operations
- Provided real-time troubleshooting and technical support to instructors and students, ensuring minimal downtime and consistent program delivery
- Acted as liaison between the camp site and headquarters for resolving technical issues, streamlining communication and implementation of solutions
- Managed and tracked weekly equipment inventory, ensuring all devices and tools are accounted for and operational

### Cal Poly Pomona Enterprises

Pomona, CA

#### Aerospace ML Programmer - Undergraduate Research

04/2024 - Present

- Developed and optimized machine learning regression models using TensorFlow, Scikit-learn, Pandas and Matplotlib to identify defects on a wing, yielding a 73.84% increase in accuracy over previous models
- Designed and evaluated three further models for predicting Von-Mises stress fields of the beam across 40,791 coordinates, achieving  $R^2$  scores exceeding 99%
- Deployed an interactive website to demonstrate the digital twin model, allowing users to test and visualize results with WebGL and Unity at SSDM ASME 2025 Conference

### Cal Poly Pomona College of Business Administration

Pomona, CA

#### Digital Twin Programmer - Undergraduate Research

09/2024 - 05/2025

- Engineered a Unity-based VR prototype simulating classroom infrastructure from point-cloud scans, integrating IoT sensor data to support immersive educational engagement
- Built a real-time digital twin pipeline using Trimble RealWorks, Autodesk Revit and Tandem, to process point-cloud data and produce interactive BIM models
- Integrated Tandem with Unity via REST APIs to synchronize real-time digital twin environments in VR simulation
- Led the end-to-end project lifecycle and presented a functional Meta Quest 2 VR demo at CSRC 2025 Conference to academic and industry audiences

## TECHNICAL SKILLS

### Languages:

Python, SQL, Java, JavaScript, HTML, Dart, C#

### Tools/Frameworks:

Android Studio, AWS, Excel, Firebase, Flutter, Git, Jest, Jupyter Notebook, MongoDB, MySQL, Unity

### Certifications:

AWS Certified Cloud Practitioner

## LEADERSHIP

### Cal Poly Pomona Science Council

Pomona, CA

#### Director of Public Relations

09/2024 - 05/2025

- Improved digital outreach and student engagement by developing the council website and launching a thematic social media campaign, boosting visibility across the College of Science

### Sigma Phi Epsilon Fraternity, California Mu

Pomona, CA

#### Vice President of Finance

09/2024 - 05/2025

- Streamlined chapter finances by creating and managing the annual budget, leading fundraising efforts, and overseeing dues collection and tax compliance for philanthropic initiatives