Josh Booth

t+ (717) 494-6466 boothjmail@gmail.com Chandler, AZ in LinkedIn

RELEVANT WORK EXPERIENCE

Technical Product Marketer | Microchip Technology

JUN 2022 - PRESENT

- Lead technical marketing expert for the latest 8-bit PIC microcontrollers and AI-driven product features.
- Created customer-facing application layers for AI and machine learning use cases, demonstrating product capabilities.
- Developed demos, code, and technical content for webinars and industry conferences to showcase AI product integrations.
- Organized marketing strategies for AI-driven peripherals (e.g., configurable logic blocks in the PIC16F131xx).
- Engaged with developer communities through social media, forums, and technical presentations.
- Led a social media analytics initiative improving impressions and CTR by 400%.
- Identified and optimized customer journeys using AI tools to improve retention by 10%.

Machine Learning Researcher | Naval Research Lab - Space Technology Division Jun 2017 - Jan 2022

- Designed supervised learning models for video streaming AI applications using PyTorch and TensorFlow.
- · Optimized machine learning algorithms for deployment in remote environments with limited resources.
- Developed image preprocessing and feature extraction pipelines for AI video models.
- Created technical documentation and presented model performance results to technical and non-technical stakeholders.

Robotics Systems Engineer | Mark Oil and Gas LLC.

SEP 2016 - JUN 2022

- · Developed robotics solutions integrating AI for mechanical simulations, automation, and image processing.
- Designed custom firmware and wiring for robotics control systems.
- Conducted hardware debugging and optimization for embedded AI systems.

SAMPLE ENGINEERING DESIGNS

- **PEEK 3D Printer** AI-driven system for real-time thermal management and printing control.
- **BOMX Audio Visualizer** Embedded AI for dynamic visual effects.
- **% AI-Driven Security System** Security system integrating computer vision and ML for real-time threat detection.

COMPETENCIES

- AI/ML Tools: Python, TensorFlow, PyTorch, TFLearn
- **Software:** C, Python, Linux, Marlin, Bash, Embedded Development, Fusion 360, KiCAD, Eagle, MPLAB X, XC8
- Hardware: Circuit Design, Programmable Logic, PIC and AVR Microcontrollers, EDA tools
- Personal Interests: Chess, Piano, Track and Field, Rugby, Rock Climbing, Valorant