Reeve Fernandes

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EDUCATION

Michigan State University

East Lansing, MI

Bachelor of Sceince in Computer Engineering

Aug. 2021 - May 2025

EXPERIENCE

 $\mathbf{GENISAMA} \mid \mathit{FPGA}, \; \mathit{Verilog}, \; \mathit{SystemVerilog}, \; \mathit{VHDL}, \; \mathit{Design}, \; \mathit{Verification}$

May 2022 - Aug. 2023

Hardware Developer

Okemos, MI

- Prototyped real-time image processing hardware system on intel FPGA, TFT Screen, and SDI protocol.
- Conducted design and virtual and physical verification of hardware design.
- Implemented documentation practices to ensure knowledge transfer

CREATE for STEM - MSU | CMS, Drupal, CSS, PHP, MariaDB Student Tech

Oct. 2021 – Present

- East Lansing, MI
- Assess and troubleshoot computer problems brought by faculty and staff
- Maintain upkeep of website, computers, research equipment, and Inventory

PROJECTS

Neural Network Visualizer | Parser, React, TypeScript, Next.js, Three.js

May 2024 – Jul. 2024

- * Developed a custom parser for creating and training custom Multi-Layer Perceptron
- * Three Dimensional computation graph visualization as nodes and links of the loss function, forward pass, and back-propagation

Velox | React, Node.js, PostgreSQL, Wastson IBM, Git

Sep. 2023

- * Developed a real-time task management system for hospitals to streamline task assignment from doctors to PAs
- * Integrating voice-activated task registration via IBM Watson's speech-to-text service for sterile conditions

City Buddy | JavaScript, Node.js, MongoDB, Mapbox, Google geocoding

Feb. 2023

- * Developed an Interactive map with dynamic routing
- * Allowing users to mark and share information about dangerous streets and incidents, enhancing community safety by routing around the marked streets

SignLink | JavaScript, MediaPipes, Tensorflow, Peer.js

Jan. 2023

- * American Sign Language (ASL) Video conferencing solution
- * Solution integrates real-time transcription using Media pipes hand gesture and TensorFlow learning model to recognize hand gestures

TECHNICAL SKILLS

Languages: Python, C/C++, SQL (Postgres), NoSQL (MongoDB), JavaScript, HTML/CSS

Frameworks: React, Next.js, Node.js, Three.js, Material-UI, Tailwind CSS, WordPress

Developer Tools: Git, VS Code, PyCharm, Quartus, Figma