Nicholas Lang

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EDUCATION

University of Michigan, Ann Arbor, MI   Apr 2022
Bachelor of Science in Engineering in Computer Engineering   GPA: 3.38/4.00
Minor in Entrepreneurship
Coursework: Embedded Systems, Computer Vision, Data Structures and Algorithms, Signals and Systems,
             Probability and Statistics, Entrepreneurial Creativity, Entrepreneurial Business Basics

EXPERIENCE

Ford Motor Company, Dearborn, MI
Product Development Intern, In-Vehicle Infotainment Tools Team   May 2021 – Jul 2021
- Wrote Python CLI to automate process of adding, editing, and copying CAN messages for vehicle simulation test-bench DBC files, reducing time needed to add new messages from ~15 min. per message to ~1 min. for all messages.
- Created Visual Studio solutions that run MATLAB feature models in tandem with smart test-bench so that new features would not need to be integrated into the whole system to test or run.

Coquille Valley Hospital, Coquille, OR
IT Intern   May 2020 – Jul 2020
- Involved in all aspects of computer installation in new clinic rooms: terminated network cables, set up necessary software, and installed computers in all rooms for easy use by doctors and nurses.
- Rolled out Single Sign On system on all ER and nurse station computers to ensure staff could treat patients and access medical charting software quicker and easier.
- Researched and determined medication scanner bar code errors and updated scanner software so meds could be correctly scanned and registered in system.

UM College of Engineering, Ann Arbor, MI
Engineering and Entrepreneurship Instructional Aide, Multiple Classes   Sep 2019 – Present
- Lead lab sessions and hosted office hours for Autonomous Drones and Logic Design courses. Balanced LiPo batteries, repaired drone frames, troubleshot ArduPilot software package and to ensure labs went smoothly for students.
- Assisted professors with grading assignments, taking attendance, in-class events, and running Zoom meetings to establish an excellent learning experience for students both in person and remote.

PROJECT EXPERIENCE

TechLab @ MCity Fellowship, Ann Arbor, MI
Adastec Corporation   Jan 2021 – Present
- Conducted literature review of single and multi-modal sensor publications to create a sensor fusion architecture for enhanced perception in adverse weather conditions, deployed on level 4 autonomous busses.
- Developed CNN model that de-noises Lidar point clouds affected by adverse weather such as rain or fog.

SKILLS

Computer Languages & Tools: C/C++, Python, MATLAB, Assembly, Windows, Mac OS, Linux, Office
Frameworks & Environments: ROS, NumPy, PyTorch, Regex, Arduino, STM32Cube, Quartus, Visual Studio, XCode
Hardware: Surface and Through Hole Soldering, Digital Circuit Design, IT Network Patching and Cable Termination

LEADERSHIP & ACTIVITIES

Work Manager & Groundskeeper, MichMinnies Cooperative House   Jan 2021 - Present
Avionics Subteam Member, Michigan Aeronautical Science Association   Sep 2019 – Apr 2020
Power Subteam Member, Michigan Hyperloop Build Team   Sep 2018 – Dec 2018