Dylan J. Kangas

Electrical & Computer Engineer

Contact

(231) 492-5843
dylankangas@gmail.com
dylankangas.github.io

Skills

Additive Manufacturing, AC/DC Circuit Analysis, Git, High Speed I/O, Linux, Mechanical Design, Microsoft Office, Multiplexing, PCB/Schematic Design, SMD Soldering

Embedded Controllers:
ARM, AVR, Allen Bradley PLCs, Altera FPGAs

Programming:
ARM Assembly, Arduino, C/C++, JS, Julia, MATLAB, Python, Verilog, VHDL

Design Software:
ANSYS, Eagle, Fusion 360, Inventor, KiCAD, SolidWorks

Training & Certifications

Responsible Conduct of Research
Lean Manufacturing
5S Implementation
OSHA Certification

Leadership

Research Team Lead
Engineering Lab Instruction
Employee Onboarding
Robotics Team Captain

Accomplishments

SPIE Conference Presenter
Full MS Scholarship Recipient
Two-time Design Contest Winner
Dean's List
National Robotics Challenge

Community Involvement

Blood Donation
National Cherry Festival
Community Meals
Make a Difference Day

EDUCATION

MICHIGAN TECHNOLOGICAL UNIVERSITY

MS ELECTRICAL & COMPUTER ENGINEERING — APR 2023 - APR 2024

MICHIGAN TECHNOLOGICAL UNIVERSITY

BS ELECTRICAL ENGINEERING — AUG 2019 - APR 2023
MINOR IN MATHEMATICS

MANUFACTURING TECHNOLOGY ACADEMY

ENGINEERING TECHNICAL SCHOOL — SEPT 2016 - APR 2019

Exclusive engineering-oriented curriculum with an emphasis on communication, project planning, and robot construction.

WORK EXPERIENCE

GRADUATE RESEARCHER

MICHIGAN TECH – HOUGHTON, MI — APR 2023 - APR 2024

Led development of robust autonomous surface vessels for the US Navy and terrestrial robots for the US Army using ROS. Implemented 3D LiDAR mapping algorithms and developed metrics for quantifying perturbations on sensor data. Author of research publications through Michigan Tech and SPIE.

LABORATORY INSTRUCTOR

MICHIGAN TECH – HOUGHTON, MI — SEPT 2023 – DEC 2023

Instructed circuits laboratory for undergraduate students requiring lesson planning, co-authoring schematics/procedure manuals, grading, and communication with students and the instructor. Labs centered around breadboard prototyping analog electronics using multimeters, function generators, and oscilloscopes.

RESEARCH ASSISTANT

VISIONYZE/MICHIGAN TECH – HOUGHTON, MI — JAN 2022 – JAN 2023

Responsible for creating and training neural networks to generate and interpret natural language for summarization topics. Training models using human feedback, user interface construction, coauthoring research publications, programming in Python, HTML, JS, and implementing the Zoom API.

LABORATORY ASSISTANT

MICHIGAN TECH – HOUGHTON, MI — SEPT 2021 – JAN 2022

Instructed programming curriculum and assisted students with laboratory procedures and homework. Heavy use of C/C++.

ENGINEERING INTERN

SKILLED MANUFACTURING INC. AEROSPACE – TRAVERSE CITY, MI — JUN 2018 – JUN 2019

Accountable for highly funded projects with strict deadlines, creation of detailed work instructions, fixture design, process engineering, manufacturing, as well as thorough documentation. Frequent use of SolidWorks and Microsoft Office.