Connor Flanigan

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EDUCATION

WORCESTER POLYTECHNIC INSTITUTE

BS in Robotics Engineering
October 2016 | Worcester, MA

LINKS

Github:// TheFlanMan
Github:// CFlaniganMide
LinkedIn:// Connor-Flanigan

COURSEWORK

Algorithms
Artificial Intelligence/Machine Learning
Unified Robotics I-IV (Actuation, Sensing, Manipulation, and Navigation)
Software Engineering
Mechatronics
Controls

SKILLS

LANGUAGES

Significant Experience:
Python • Matlab • Lua
Some Experience:
Java • JavaScript • HTML
CSS • C/C++ • Labview • C#

DEVELOPMENT ACTIVITIES

Software Design • Requirements Elicitation

PACKAGES AND TOOLKITS

Python:
NumPy • SciPy • TensorFlow • ROS
Matlab:
Signal Processing • Compiler • MEX

ANALYSIS

Signals Processing • Spectral Analysis • Fourier Analysis • Circuits • Software Profiling

SOFTWARE

Solidworks • ESPRIT • Pycharm

PROFESSIONAL EXPERIENCE

MIDÉ TECHNOLOGY | Software Engineer II

November 2017 - Present | Woburn, MA

- Developed a novel algorithm for sound event detection using spectral analysis to classify rat calls in medical research
- Lead software engineer for DeMCAS, a SBIR project with the Army to develop an automated design tool
- Project manager and primary software engineer for the Endaq Analyzer, a tool to convert, visual, and analyze Midé's proprietary, EBML-based file format
- Wrote SBIR contract proposals for the DoD involving spectrographic signal analysis, machine learning, and condition-based maintenance

IDEXX | Software Engineer

February 2017 – October 2017 | Westbrook, ME

- Developing a system and interface for running custom chemical assays using Catalyst machines
- Designing, building, and testing system to recreate various errors in manufactoring for product testing
- Designed circuits to monitor and breakout electrical systems in current products to test performance

WPI ROBOTICS LAB | Lab Designer, TA

July 2015 - September 2015 | Worcester, MA

- Developed software in C# for integration intoaserver to automate designs for a varietyh of products within a team of three developers
- Wrote instruction manuals for assembly and installation of Wasco's residential skylights

WASCO PRODUCTS | Engineering Intern

July 2013 - September 2013, June 2014 - September 2014 | Wells, ME

- Developed software in C# for integration into a server to automate designs for a variety of products within a team of three developers
- Wrote instruction manuals for assembly and installation of Wasco's residential skylights

PROJECTS

MIDÉ TECHNOLOGY | Endaq Analyzer

February 2018 - present

Lead developer and designer of the Endaq Analyzer, a Matlab-based desktop application to open, visualize, analyze, and export Midé's EBML based IDE files. The Analyzer uses Matlab's Signal Processing Toolbox to calculate and render various time and frequency domain analyses.

MIDÉ TECHNOLOGY DeMCAS

April 2018 - present

Lead developer and designer of the Endaq Analyzer, a Matlab-based desktop application to open, visualize, analyze, and export Midé's EBML based IDE files. The Analyzer uses Matlab's Signal Processing Toolbox to calculate and render various time and frequency domain analyses.

WPI | Gamified Music Learning System with VR Force Feedback for Rehabilitation

August 2015 - April 2016

Designed the mechanical and electrical systems for a custom haptic glove, utilizing a soft actuation system.