

Daniel Wahl

INFORMATION

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5251 N Rockwell St Unit 3
Chicago, IL 60625

EXPERIENCE

- PRESENT 2017/11 ELECTRICAL ENGINEER (INDEPENDENT CONTRACTOR) Chicago, IL
Sigora International
- Used Altium to design custom electronics for a microgrid utility company.
 - Developed new radio module for wireless mesh networking between customer nodes, using Wirepas stack.
 - Modified existing smart meter to include additional anti-theft current sensing.
- PRESENT 2017/11 RESEARCH ANALYST (INDEPENDENT CONTRACTOR) Chicago, IL
Landscape Capital Management
- Used Python, Pandas, and Scikit-learn to perform financial analysis for investment management firm.
 - Investigated novel datasets, designed custom trading strategies, and performed comprehensive backtests.
 - Informed the firm’s investment strategy with research in employment and energy sectors.
- PRESENT 2017/01 FOUNDING MEMBER, ENGINEER Chicago, IL
JustDesign Cooperative
- Helped found a worker-owned consulting firm, providing professional design services for community groups and environmental justice projects.
 - Created the Air Quality Chicago website for Environmental Law and Policy Center, used for tracking citizen science PM2.5 monitoring.
 - Provided technical support for Pilsen Environmental Rights and Reform Organization’s research and advocacy into Chicago’s lead water crisis.
 - Designed an inexpensive, open-source well siting meter for Global Hope Network International, used to locate underground water for borehole drilling applications.
- PRESENT 2010/01 SENIOR CONTROLS ENGINEER Evanston, IL
HDT Engineering Services, Robotics
- Primary developer of embedded control software for upper arm and wrist actuators in the Modular Prosthetic Limb, part of DARPA’s Revolutionizing Prosthetics program.
 - Created ROS interface for HDT’s robotic arms and actuators. Generated URDFs from Solidworks models, wrote CANbus communications interface, and used MoveIt! for arm teleoperation and semi-autonomous control.
 - Lead embedded software engineer for tactor, a small haptic feedback device designed for DARPA’s HAPTIX program, currently undergoing initial patient trials.
 - Designed tactor control board, with CANbus, force sensing, and bluetooth wireless interface, also for HAPTIX program.
 - Developed control software for Protector, a hydraulic anti-IED tracked vehicle, winner of the JIEDDO Disrupt Challenge at the 2012 Robotics Rodeo.
 - Wrote custom real-time embedded code for Protector and other HDT robotic applications in Linux and QNX, on both ARM and x86 processors.
- 2009/12 CONTROL SYSTEMS ENGINEER Rochester, NY
2007/06 *Delphi Automotive, Fuel Cells*
- Primary developer of fuel cell system control software in Matlab Simulink with RTW.
 - Created system plant models for control tuning and design simulation.
 - Supported test engineering and generated custom LabView test applications, assisted in the design of control and power electronics.

EDUCATION

- 2007/04 MASTER OF SCIENCE IN MECHANICAL ENGINEERING Ann Arbor, MI
2006/08 *University of Michigan* GPA: 3.81/4
- 2006/05 BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING Buffalo, NY
2003/08 *University of Buffalo* GPA: 3.42/4