

# Daniel Wahl

## INFORMATION

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## PROFESSIONAL EXPERIENCE

PRESENT 2017/11	ENGINEERING CONSULTANT, OWNER <i>Consequential Technologies, LLC</i> <ul style="list-style-type: none"><li>– Developed simulation environment for <i>PickNik Robotics</i>’ orbital grappling and refueling projects, using ROS 2 and MuJoCo.</li><li>– Wrote control and communications software for <i>HDT Robotics</i>’ fleet of Wolf 3/4/X and Protector logistics vehicles.</li><li>– Developed simulation and replay environment for <i>AppHarvest</i>’s tomato picking robot, using ROS 2 and MoveIt 2.</li><li>– Created solar meter electronics and software for <i>Iluméxico</i>, currently deployed in 20K+ homes in rural Mexico.</li><li>– Investigated novel datasets and developed trading strategies for <i>Landscape Capital Management</i>, using Pandas and Scikit-learn.</li></ul>	Chicago, IL
PRESENT 2018/08	ROBOTICS CONSULTANT, TRAILER CONNECT <i>Outrider</i> <ul style="list-style-type: none"><li>– Developed control software for <i>Outrider</i>’s Trailer Connect team, responsible for autonomously connecting yard trucks and trailers.</li><li>– Used ROS and MoveIt to interface with Motoman industrial robot arm, integrated LiDAR and 3D camera for perception and control.</li><li>– Wrote finite state machine library, currently in use throughout <i>Outrider</i> system.</li></ul>	Remote
2018/12 2010/01	SENIOR CONTROLS ENGINEER <i>HDT Robotics</i> <ul style="list-style-type: none"><li>– Wrote embedded control software for upper arm and wrist actuators in the Modular Prosthetic Limb, part of DARPA’s Revolutionizing Prosthetics program.</li><li>– Created ROS interface for HDT’s robotic arms and actuators.</li><li>– Developed embedded software for tactor, a small haptic feedback device designed for DARPA’s RE-NET program, currently undergoing patient trials.</li></ul>	Evanston, IL
2009/12 2007/06	CONTROL SYSTEMS ENGINEER <i>Delphi Automotive, Fuel Cells</i> <ul style="list-style-type: none"><li>– Wrote fuel cell system control software in Matlab Simulink with RTW.</li><li>– Created system plant models for control tuning and design simulation.</li></ul>	Rochester, NY

## VOLUNTEER EXPERIENCE

PRESENT 2020/09	BOARD TREASURER, ADVISOR <i>Lead Exposure Elimination Project (LEEP)</i> <ul style="list-style-type: none"><li>– LEEP advocates for lead paint regulation to reduce lead poisoning and improve the health, wellbeing, and potential of children worldwide.</li><li>– Oversaw budget planning, financial reporting, and record keeping as board treasurer.</li><li>– Provided initial seed funding for organization and served as early advisor.</li></ul>	Remote
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## EDUCATION

2021/04	DEEP LEARNING SPECIALIZATION <i>DeepLearning.AI</i>	Online
2020/02	REINFORCEMENT LEARNING SPECIALIZATION <i>University of Alberta</i>	Online
2015/05	MACHINE LEARNING COURSE <i>Stanford</i>	Online
2007/04 2006/08	MASTER OF SCIENCE IN MECHANICAL ENGINEERING <i>University of Michigan</i>	Ann Arbor, MI
2006/05 2003/08	BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING <i>University at Buffalo</i>	Buffalo, NY