

DAVIN LANDRY

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EDUCATION

NORTHWESTERN UNIVERSITY

Master of Science in Robotics

Evanston, IL

December 2022

PURDUE UNIVERSITY

Bachelor of Science in Mechanical Engineering

West Lafayette, IN

Certificate in Entrepreneurship and Innovation

May 2019

May 2019

PROFESSIONAL EXPERIENCE

The INSTITUTE For HUMAN MACHINE COGNITION (IHMC)

Pensacola, FL

Nadia Humanoid Robot Project

Feb 2020 - Aug 2021

- Assisted in the development of a high speed and high range of motion hydraulic humanoid robot funded by the Office of Naval Research
- Conducted literature review on humanoid robotic feet to design and prototype several robotic feet, incorporating bio-inspired mechanical design such as toes
- Defined requirements; commissioned the design; and tested 6-axis Force/Torque sensor for robot foot
- Honed specialized prototyping and manufacturing skills through hands on experience such as exploring different methods for laying and curing carbon fiber structures for leg components of the robot

McDERMOTT INTERNATIONAL

Houston, TX

Instruments and Controls Intern

June - Aug 2018

- Developed logic gates for plant-wide safety shutdown protocols for TOTAL's \$1.7 billion ethylene cracker
- Iterated CAD blueprint designs for piping and instrumentation until pump systems met client standards

CHICAGO BRIDGE & IRON COMPANY

The Woodlands, TX

Innovation Intern

June - Aug 2017

- Produced case briefing materials on the potential market and scalability of various blockchain pilot projects
- Created and maintained the Innovation Business Unit iShare collaboration website

ENGINEERING DESIGN EXPERIENCE

Shear Haptics: Virtual Reality haptic controller

2022

- Designed and prototyped a set of VR haptic controllers that use shear movement in the grip to simulate weighted objects in motion and in impact
- Developed a virtual demo environment in Unity to test and demonstrate the haptic feedback capabilities

SLAM: Simultaneous Localization and Mapping from scratch

2022

- Designed and implemented SLAM package in ROS for a Rotbotis turtlebot differential drive robot
- Created C++ libraries for calculating 2D rigid transforms and Extended Kalman filters.

BALANCIAGA: Autonomous Ball Balancing Robot

2021

- Utilized computer vision techniques and control theory to conduct a Franka Emika Panda robot arm to balance and steer a ball on a whiteboard
- Implemented maze solving algorithm and PD controllers to control the position of the ball on the board

RELEVANT SKILLS

<i>Design Software:</i>	CATIA V5, AutoCAD, SolidWorks, Creo, OnShape, Unity, Git, ROS
<i>Coding Languages:</i>	MATLAB, NI Labview, C, C++, JavaScript, Python, HTML&CSS, jQuery
<i>Presentation Software:</i>	Microsoft Office Suite, Adobe Premiere Pro
<i>Certified in:</i>	Onshape Top-Down Design Training Course; CPR; First Aid
<i>Extracurricular:</i>	D5 Competitive Paintball, World Travel, Snowboarding