

Michael Udo Thamm

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Nationality: German, Canadian



Education

- Since 08/2019 **Ma.Sc. - Electrical & Computer Engineering (Part-Time) [GPA: 93.25]**
Charge Labs - University of Windsor, Canada
- Working within a Tier 1 Canada research chair lab for electrified vehicles
 - Multi-objective genetic algorithm optimization of high-speed linear induction motors
 - 4-month course on optimization foundations (neural networks, application case studies)
 - 4-month course on sensor and vision systems (K-Means clustering, image filtering/processing)
- 08/2015 - 08/2019 **Ba.Sc. - Electrical & Computer Engineering, Minor in Mathematics [GPA: 79.17]**
University of Windsor, Canada
- Capstone Project - Linear induction motor integration for SpaceX-Hyperloop competition

Related Experience

- 05/2017 - 07/2020 **Propulsion Team Lead (University of Windsor Team), *SpaceX - The Hyperloop Pod Competition, USA***
- Met Elon Musk and held weekly design reviews with SpaceX engineers
 - Led a team of engineering students to rank among the top 21 finalists worldwide
 - 2 years of Python programming for integration and optimization of propulsion system

Professional Experience

- Seit 08/2021 **Junior Software Developer, *Kinarm, Canada***
- Java and Python backend programming resulting in 3 projects and 21 combined resolved tickets
 - Operate within the main IT role resulting in 2 projects and 23 resolved tickets
 - Assembly and integration of Linux Ubuntu host server and Windows Server 2022
 - On-site installation and collaboration with neuroscience researchers using Kinarms
- 08/2018 - 07/2021 **Controls Specialist, *Brave Control Solutions, Canada***
- IIoT asset data collection project for Ford using MQTT broker and Siemens Simatic IPC
 - ABB Robot programming in Rapid to synchronize adaptive welding
 - Commissioned mechatronic projects across Mexico, USA, Canada
- 05/2017 - 08/2017 **Controls Design - Intern, University of Windsor, *Valiant Machine & Tool Inc., Canada***
- PLC programming of weld cells using Rockwell, RSLogix
- 06/2016 - 08/2016 **Electrical Assembly, *EnerQuest, Canada***
- Assembled high voltage E-Houses for high power transmission (30 kV)

Language Skills

German - B2 (Native)

English - C2

French - A2

Spanish - A1

Profile of Technical Skills

- Programming** **Python** (Pytest, Pandas, JSON, Logger), **Java** (Apache, JUnit), **C++** (Eigen), **MATLAB** (Optimization Toolbox)
Powershell (Disk Management), **Batch** (Task Scheduler), **Shell** (Cron job script automation)
- GUI Frameworks** **Python** (wxPython, Tkinter), **Java** (Swing), **C++** (SDL2)
- Dev Tools** **Version Control** (Git, Subversion), **Profilers** (cProfile), **Virtualization** (VBox, VMWare, Hyper-V, Docker)
- Software** **Project Tracking** (Jira, Confluence), **CAD** (ANSYS, AutoCAD, Fusion360), **PLC** (Siemens TIA, Rockwell RSLogix)
- Operating Systems** **Windows** (Servers 2008 - 2022), **Linux** (Debian, Ubuntu Server)