Ryan R. Gysin

gysin.ryan@gmail.com | 1220 N 45th St Apt 406, Seattle, WA, 98103 | 989-450-1867

Experience

Current | The Boeing Company, Tukwila, WA
July 2023 | *Real Time Software Engineer*
- Triaged and resolved issues discovered in hardware-in-the-loop integration lab
- Implemented communication protocol with external identification application
- Developed data aggregator to create detailed profile of targets in real time

May 2023 | Microsoft, Redmond, WA
Nov 2018 | *Software Engineer II*
- Designed WinRT API for Microsoft reverse debugger
- Updated Application Verifier to allow it to run on ARM64 processors
- Reduced build failures by 90% by isolating imaging jobs in Azure VMs

Oct 2018 | Nexteer Automotive, Saginaw, MI
July 2017 | *Manufacturing IT Engineer*
- Designed C# applications to act as interface between PLCs and SQL databases

Aug 2016 | Wrote LabVIEW VIs to decode JSON messages and transmit them through TCP sockets
May 2016 | Developed PLC routines to communicate with C# app and validate part specifications
- Co-led C# development training session specializing in WPF and .NET frameworks

Education

Apr 2017 | Bachelor of Science in Computer Engineering
University of Michigan, Ann Arbor

Projects

Apr 2017 | Michigan Autonomous Aerial Vehicle (MAAV)
Sept 2015 | *President and Navigation Lead 2016-2017*
- Led team of 40 to place 2nd in the 2016 International Aerial Robotics Competition
- Developed computer vision code for detecting grid and ground robots

Apr 2017 | MGoKart
Jan 2017
- Created autonomous gokart as concept for autonomous formula car
- Developed path planning and data filtering algorithms to steer the kart
- Designed and built hardware architecture to allow power distribution and communication
- Wrote code in C, Python, and Arduino to allow communication between the software algorithms, controls algorithms, and motors
- Reduced electromagnetic interference in wires across the kart by approximately 80%
- Simulated sensor inputs to system and validated outputs using vehicle dynamics model

Additional

Languages: C++, C, C#, Python, T-SQL
Tools: Git, Matlab, LabVIEW
Assisted in research resulting in childrens book about cavitation bubbles
Drove U of M blue buses for 3 years while in college