Ryan R. Gysin

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Education

Apr 2017 | Undergraduate Degree in Computer Engineering
University of Michigan (U of M), Ann Arbor
Relevant Classes: Operating Sytems, Machine Learning, Microprocessor Design, Embedded Control Systems, Computer Security, Logic Design, Computer Organization, Signals and Systems, Data Structures and Algorithms
GPA: 3.0/4.0

Projects

Apr 2017 – Jan 2017 | MGoKart
- Created autonomous gokart as concept for autonomous formula car
- Developed path planning algorithms and simple kalman filter in Python
- Designed hardware and communication architectures
- Wrote communications code in C and Python
- Wired all components to gokart

Apr 2017 – Sept 2015 | Michigan Autonomous Aerial Vehicle (MAAV)
- President and Navigation Lead 2016-2017
- Worked on quad-rotor that placed 2nd in the 2016 International Aerial Robotics Competition
- Developed computer vision code for detecting corners and ground robots based on size and color
- Designed code that tuned computer vision software to reduce noise
- Managed entire team code base using git

Dec 2014 – Sept 2013 | Mechanical System Design
- Harnessed Rotational Momentum of bicycle to light a light bulb using chain linkages and magnetic induction
- Prioritized money vs. performance as well as budgeted time

Work Experience

Current – July 2017 | Nexteer Automotive, Saginaw, MI
Manufacturing IT Engineer
Interned summer of 2016, went on to take internship as full time job
- Designed C# applications to interface with SQL databases

Aug 2016 – May 2016
- Worked in Manufacturing IT to trace parts through machine processes

May 2017 – July 2014 | U of M Parking and Transportation Services, Ann Arbor, MI
Bus Driver
Responsible for the transportation and well being of hundreds of students daily
Learned to manage different personalities through communicating with passengers frustrated about delays

Aug 2014	U of M Mechanical Engineering Department, Ann Arbor, MI
Sept 2013	*Research Assistant to Prof. Eric Johnson*
	Created GUI to model bubble cavitation in a viscoelastic media
	Gained understanding of Matlab scripting and GUI's

Skills

Languages:	C++, C, C#, LaTeX, Python, SQL, Verilog, Ruby, Mathematica
Tools:	Git, Matlab, OpenCV