

Fabian Fuxa

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OBJECTIVE

Seeking summer internship position starting May 2017 focusing on web development and database management.

EDUCATION

University of Michigan

Ann Arbor, MI

Bachelor of Science in Computer Science Engineering; Minor in Business

April 2019

GPA: 3.65/4.00

Relevant Courses: Data Structures and Algorithms, Discrete Mathematics, Introduction to Computer Organization, Multivariable Calculus

EXPERIENCE

ENGR 101 – Introduction to Computers and Programming

Ann Arbor, MI

Instructional Assistant & Autograder Manager

January 2017 – Present

- Maintain and improve the class “autograder” website, to which students upload code that is automatically checked for correctness, in order to facilitate grading and improve grade turnaround time.
- Teach students basic programming concepts in C++ and MATLAB and debug code in office hours
- Use HTML, CSS & JavaScript to design website and Python, Django, MATLAB, Octave, Docker and RabbitMQ to test submitted code, submit grades to Canvas, provide feedback to students and gather statistics on grades

Michigan Research Community (MRC)

Ann Arbor, MI

Peer Research Advisor

September 2016 – Present

- Conduct monthly seminars with 12 freshmen and a guest speaker about sustainable research to introduce incoming students to research methodology/practices, potential career paths and faculty members
- Assist members in acquiring research projects and handle associated difficulties
- Review resumes and provide interview tips for their research position search to help them find a position

ENGR 100-600 – Underwater Vehicle Design

Ann Arbor, MI

Technical Grader

September 2016 – December 2016

- Graded technical portions of class projects, papers and exams covering 3D modeling, fluid dynamics, basic electric circuits, systems design and technical documentation
- Developed organizational and communication skills while grading material for over 100 students with one other grader

PROJECT EXPERIENCE

Robotics Programing and Optimization Lab

Berlin, Germany

Study Abroad

May 2016 – June 2016

- Developed a fastest line following algorithm using C++ for the M3pi robot using a PD controller with Nelder Mead optimization methods
- Created robot simulation using MATLAB for efficient testing of performance-affecting parameters
- Developed human Bluetooth control from computer using Python with pySerial and Pygame modules

Microplastics Research Lab

Ann Arbor, MI

Research Assistant

September 2015 – June 2016

- Designed a low-cost, self-cleaning model-scale microplastics filter for use in wastewater treatment plants
- Developed 3D model of testing rig for system analysis, used woodworking skills to build 2 main components

COMPUTER SKILLS

- *Languages:* C++, Python, SQL, Swift, HTML, CSS, JavaScript, MATLAB, Octave, R
- *Frameworks/Environments:* Django, Bootstrap, Apache, MySQL, Docker, RabbitMQ, XCode, Ubuntu (Linux), Git
- *Other:* Rhinoceros and SolidWorks (3D modeling)

OTHER SKILLS & ACTIVITIES

Languages: Native proficiency in Spanish & Portuguese; entry-level German

Activities: “Groove High Energy Percussion” and “Michigan Electronic Dance Music Association” (MEDMA)