April Roszkowski

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Education

May 2023 **University of Wisconsin-Madison, College of Letters and Sciences**
- Masters of Science in Computer Science
- Focused coursework on computer graphics/visualization and topics in applied mathematics

May 2021 **University of Minnesota-Twin Cities, College of Science and Engineering**
- Bachelors of Science in Computer Science, minor in Mathematics

Skills

Programming C, C++, Python, Java, OpenGL, JavaScript, HTML, CSS
Development tools Visual Studio, git, SVN, Unix
Other software MatLab, LaTeX, Microsoft Office

Research

December 2022 – September 2022 **Data Visualization, University of Wisconsin**
- Studied use of dimensionality reduction techniques in academia under professor Michael Gleicher
- Performed informal literature review of how authors leveraged DR techniques (e.g. for visual evaluation of clustering, as preprocessing step in data analysis workflow)

March 2020 – June 2019 **Applied Mathematics, Cornell University**
- Studied multi-robot motion planning using optimal control theory under professor Andrew Borum
- Visualized bifurcations within our problem's solution space and characterized general stable solutions to the system
- See website for summary slide deck

March 2019 – June 2018 **Computer Graphics, University of Minnesota**
- Recreated traditional Micronesian seafaring methods using virtual reality to bolster Micronesian cultural heritage under professor Daniel Keefe
- Collaborated with and maintained a code base for 5 other undergraduates and myself

Employment

May 2023 – September 2021 **Teaching Assistant, University of Wisconsin**
- TA for the "Programming III" course
- Graded course work, held office hours, worked one-on-one with students
- Helped with administrative tasks : wrote scripts to automate grading, organized via spreadsheets

September 2020 – May 2020 **CNC Toolpathing Software Intern, Protolabs**
- Worked alongside a scrum team developing new features for in-house C++ software used to generate lathe and mill toolpaths for part machining
- Designed and implemented a new model for a mill-turn machine improving machining time estimates. Collected and analyzed data to determine efficacy
- Significantly improved runtime of thin area detection algorithm