Madeline Bocek

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Education

2017-2021 **Bachelor of Science: Computer Science** — Completed Aug 2021

- University of Minnesota, Twin Cities — GPA: 3.58

Work Experience

June 2022 - Present **Eldorado National Forest** - GIS Intern - Placerville, CA

- Completed spatial edits of roads and trails via ArcMap to be used in the Motor Vehicle Use Map for the Lake Tahoe Basin Management Unit. This was done by collaborating with the road and trail coordinators, referencing imagery and Li-DAR, and running internal tools for quality control.
- Supporting GIS requests, such as creating contract maps, GPS field work, and troubleshooting general technology issues.

Feb 2022 - Jun 2022 **ESRI** - Desktop Support Analyst - Redlands, CA

- Assisted customers with troubleshooting ArcGIS Online, ArcGIS Pro, and ArcMap products by asking questions, referencing documentation, running tests, and collaborating with others.
- Learned how to balance multiple projects under time constraints by owning 7+ cases

May 2021 - Oct 2021 **University of Minnesota Forestry Department** - Researcher - Minneapolis, MN

- Gathered trail data from public parks via Stereolab's ZED stereo camera.
- Extracted object data from camera using the SDK provided by Stereolab in Python. This data was then used to track users, with the ultimate goal of determining the average distance between trail users for pandemic planing.

June 2020 - Aug 2020 **Medtronic** - Engineering Intern - Remote

- Gained an understanding of document quality control by editing documents pertaining to Medtronic's mapping from Agile Project Lifecycle Management to Medtronic Agile Process.

Technical Skills

Python, C, C++, SQL, MatLab, GitHub, TestComplete, ArcGIS Pro, ArcGIS Online, Avenza

Relevant Coursework

Completed Courses: Advanced Programming Principles, Identification of Woody and Herbaceous Plants, Spatial Databases, GIS for Natural Resource Management, Statistics, Principles of Databases, Advanced Remote Sensing for Resource Management

Projects

- **Remote Sensing for Natural Resource Management** - Downloaded Landsat data and calculated average NDVI of burn scars for fires from 1997-2020. Past fires were used to estimate the current rate of regrowth for the Carr fire (2018). Web Link: Visualizing Forest Fire Regrowth.
- **Medtronic** - Created a Python script that streams data from an accelerometer to an AWS database.

Book Recommendations

- **Novels/Fiction** - My Year of Rest and Relaxation by Ottessa Moshfegh, These Ghosts are Family by Maisy Card, A Little Life by Hanya Yanagihara
- **Essays/Non-Fiction** - Trick Mirror by Jia Tolentino, The Empathy Exams by Leslie Jamison, Hood Feminism by Mikki Kendall