

Madeline Bocek

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Education

2017-2021 **Bachelor of Science: Computer Science** Completed Aug 2021
○ University of Minnesota, Twin Cities GPA: 3.6

Work Experience

- May 2021 **University of Minnesota Forestry Department** - Minneapolis, MN
- Current ○ 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.
- April 2021 **Three Rivers Parks District** - Orono, MN
- Aug 2021 ○ Assisted with identifying and removing unwanted plants in public gardens.
- June 2020 **Medtronic** - Remote Northridge, CA
- Aug 2020 ○ Gained an understanding of document quality control by editing documents pertaining to Medtronic's mapping from Agile Project Lifecycle Management to Medtronic Agile Process.
○ Created a Python script that streams data from an accelerometer to an AWS database.
- June 2019 **TA Instruments** - Eden Prairie, MN
- Sept 2019 ○ Created a server to host an internal web page by downloading Apache, then designed a web page using HTML5 and CSS to display graphs based on user input.

Technical Skills

Python, Java, C, C++, SQL, HTML5, MatLab, TestComplete, GitHub, ArcGIS Pro, ArcGIS Online, Trimble eCognition

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 for fires from 1997-2020. Past fires were used to estimate the current rate of regrowth for the Carr fire (2018).
- **Systems Biology** - Built a kNN classifier using Python to predict drug sensitivity in cell lines.

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