☎ +1 518-512-7155

✉ annabelflatland@gmail.com

🌐 aflatland.github.io

🐙 github.com/aflatland

ANNABEL FLATLAND

EDUCATION

B.A. IN COMPUTER SCIENCE AND GEOSCIENCES (HONORS)

Williams College, Williamstown MA
2020 - 2024

- GPA: 3.99/4.00; Magna Cum Laude
- Phi Beta Kappa; Sigma Xi
- Relevant Courses:
  - CSCI 379: Causal Inference
  - GEOS 309: Modern Climate
  - MATH 250: Linear Algebra

Acquincum Institute of Technology, Budapest, Hungary
Spring 2023

- Relevant Course: Deep Learning

SKILLS

- Python (TensorFlow, Scikit-Learn, Pandas, NumPy, Matplotlib)
- Web Scraping (BeautifulSoup)
- GIS, PyGMT
- Google Cloud
- Google Suite

PRESENTATIONS

Conference, Presenting Author

- AGU 2023: "Tracking Arctic Sea Ice Drift Patterns with K-Means Clustering"

Conference, Co-Author

- AGU 2023: "Global Distribution of Serpentine on Mars using Machine Learning Techniques"

Bachelor's Thesis

- "Geospatial Trajectory Clustering to Identify Local Sea Ice Drift Patterns Related to Climate Forcing"

EXPERIENCE

RESEARCH ASSISTANT

Williams College   JUN 2021 - JAN 2023

- Analyzed a 42-year satellite-derived vector dataset covering the entire Arctic to compute sea ice drift trajectories.
- Applied machine learning techniques to identify 3 distinct drift patterns, resulting in the first medium-scale study to examine accelerating ice drift.
- Performed multilinear regression to identify ice freeze/melt feedbacks.
- Presented research at international conferences in San Francisco and Germany.

TEACHING ASSISTANT, MATHEMATICS OF MONEY

Johns Hopkins University   JUN 2024 - JUL 2024

- Responsible for classroom organization and teaching Python data analysis techniques for stock portfolio management.
- Facilitating a positive and engaging learning environment.

INDEPENDENT FULL STACK DEVELOPER

https://mogibot.com   DEC 2023 - JAN 2024

- Developed a GPT-powered language learning website using Python's Django REST framework and OpenAI's API for Python.
- Managed project from design to deployment on Google Cloud with Docker.

TEACHING ASSISTANT

Williams College   Fall 2021, Fall 2023, Spring 2024

- CSCI 136 Data Structures: Hosted help hours to teach Java, Git, version control and command line interfaces.

SCIENCE INTERN

NASA Jet Propulsion Laboratory   JUL 2023 - SEP 2023

- Analyzed mineral detections using satellite imagery, ArcGIS, and IDL to identify patterns in mineral distribution.
- Collaborated with a multidisciplinary team to determine the geologic context of serpentine detections to inform future rover landing site decisions.

SOFTWARE DEVELOPMENT INTERN

Siena College   JAN 2021 - FEB 2021

- Implemented web versions of applications used to teach natural language processing and Operating Systems, using HTML/CSS/JavaScript.

COMPUTATIONAL PHYSICS RESEARCH ASSISTANT

Siena College   JUN 2020 - JUL 2020

- Developed neural networks with SciKit-learn and TensorFlow to differentiate subatomic particles created at CERN and SLAC.