

ZACH YEK

• he/him •

ABOUT ME

Academic researcher looking to transition into data science. Past and current projects involve working with large datasets, leveraging a combination of **machine learning** and **statistical inference** techniques to maximally harness information from these data.

EDUCATION

2019 - 2022
State University of New York at Fredonia
B.S. Physics • GPA: 3.77/4.00

FEATURED EXPERIENCES

2021 - Berkeley SETI Research Center

Research Assistant/Intern, Telescope Observer

- Developed sequence models commonly used in **NLP** to generate vector embeddings of dynamic spectral data.
- Used vector embeddings to perform downstream tasks, such as **clustering**, **classification**, and **anomaly detection**.
- Searched for additional intermodulation products using **Computer Vision** architectures, e.g. CNNs and Autoencoders.
- Regularly operated and monitored the CSIRO Parkes Telescope for the Breakthrough Listen collaboration.

2019 - Department of Physics, Fredonia

Undergraduate Researcher

- Performed **interferometric calibrations** on existing data to account for atmospheric effects, before extracting the target's circumstellar disk mass.
- Established a **linearity correction calibration** procedure for the **CCD** camera in the Fredonia Observatory.
- Used **radiative transfer** models to investigate indirect methods for measuring protostellar luminosity.

HARD SKILLS

Python	<div></div>	ML	<div></div>
Jupyter	<div></div>	LaTeX	<div></div>
Bash	<div></div>	SQL	<div></div>