JAMIE NACHBAR

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EDUCATION

Yale University *August 2018 - May 2022*
Double Major in Computer Science and Mathematics Major GPA: 3.89/4.0 | Overall GPA: 3.70/4.0
Member of Yale College Executive Committee
Yale Summer Session in Germany (Max Kade Award) *May 2019 - July 2019*

RELEVANT COURSEWORK

Data Structures | Vector Calculus | Probability | Linear Algebra | Abstract Algebra | Complex Analysis
Intensive Algorithms | Real Analysis | Deep Learning | Artificial Intelligence

WORK EXPERIENCE

University of Virginia, Research Intern, Charlottesville, VA Summer 2020

- Did research in the UVA signal intelligence lab under Haifeng Xu. I researched the power of signalling as applied to Bayesian games, with a focus on routing games.

Yale University, Teaching Assistant: Structure of Networks January 2020 - Present

- Hold weekly workshops and prepare lessons to assist students in the course, which covers the fundamentals of networks, probability theory, linear-algebra, and graph theory.

Astraea, Intern, Charlottesville, VA Summer 2017 and Summer 2018

- Developed a tool to more easily visualize 7-band multispectral imagery: **Github**
- Created demonstrations of the RasterFrames API, like tracking deforestation in the Amazon Rainforest and measuring construction of a housing project using satellite imagery and ML: **Github**

PROJECTS

Automated Worm Tracking: Spring - 2020

- Developed using Python and the open-source tierpsy library to automatically extract statistics about the behavior of *C. Elegans* from hdf5 video.
- Analyzed behavior such as number of turns, movement over time, and number of intersections.

Zero Robotics Winter - 2017/2018

- Lead a team using C++ to code jet-propelled robots on the International Space Station
- Placed first in the world in the preliminary phase and advanced to the global finals

SLIC Robotics Challenge: **Github** Fall - 2017

- Constructed a quadcopter from spare parts, an onboard Linux computer, and two cameras
- Programmed a computer and attained semi-autonomous flight through the ArduPilot API

SKILLS

Programming Languages: Python, C, C++, Scala, Bash, Java
Libraries: Git, Jupyter, NumPy, Pandas, Apache Spark, GeoTrellis
Miscellaneous: Intermediate German, Go (game), Trail Running, Basic Juggling