

Chase Van Amburg

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EDUCATION

Harvard University

M.S. in Applied Math [GPA: 4.00]

Aug 2023 – May 2024

B.A. in Integrative Biology | Computer Science [GPA: 3.97]

Aug 2020 – May 2024

- Relevant Courses: Integrated Science | Data Science | Machine Learning | Theory of Neural Computation | Ecology | Contemporary Developing Countries

SELECTED WORK EXPERIENCE

Fathom Information Design

Cambridge, MA

Developer/Designer

Aug 2024 – Present

- Developed interactive charts and backend user flows for Rowboat.xyz, a recently launched spreadsheet visualizer
- Refined pandemic analysis tools for public health agencies and bundled them into an offline application
- Built tools for World Bank internal use when assessing international project success across over a dozen KPIs

Salata Climate Institute and Mittal South Asia Institute

Gujarat, India

Research Scientist

Apr 2023 – Jan 2024

- Led a global health research project with the largest women's union in the world (SEWA) to demonstrate up to 15°C disparities between lived experience and weather station data
- Researched the public health impacts of systematic differences in climate experience, and modeled the relationship between microclimate and physiological indicators
- Visualized and presented results to over 100 international professionals (scientists, doctors, policymakers) from NIH, Harvard, and other universities and NGOs

Harvard University

Laikipia, Kenya and Cambridge, MA

Research Scientist, Teaching Fellow

Jan 2021 – Dec 2023

- **NE Pierce Lab:** Built a deep ML computer vision classifier of tree canopy data, collected ecological data in Kenya, and modeled temperature with a coupled energy-balance model
- **MM Desai Lab:** Ran yeast transformations and fitness assays for experimental evolution
- **D Johnston Lab:** Analyzed patterns in isotope geochemistry, specifically S-34 fractionation
- **Teaching:** Taught an introductory quantitative science course (3x) and two graduate courses in evolutionary dynamics (1x) and applied machine learning (1x)

PROJECTS

Museum of Science Exhibit (Winter/Spring 2024): Designed a data-driven aesthetic visualization for a Boston Museum of Science exhibit with the City of Boston and the Berkman Klein Center

Pavvy AI Learning Assistant (Fall 2023): Built a flexible end-to-end ML pipeline to take lecture video and output transcripts, keywords, and quizzes using a combination of Whisper, a fine-tuned BERT, and GPT-3.5. Includes a user-facing frontend powered by React and backend powered by GCP

SKILLS

Data Analysis: Python, R, PyTorch, SQL

Data Visualization: D3.js, P5.js, Matplotlib/Seaborn/Plotly, Web Deployment