Katie Friis

Senior at Brown University pursuing an Sc.B. in Computer Science, interested in the intersection of design, technology, and sustainability.

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EDUCATION

Brown University — *Sc.B. Computer Science* SEP 2017 - MAY 2021 / PROVIDENCE, RI

GPA: 3.95/4.0 (cumulative), 4.0/4.0 (computer science)

Selected Coursework: UI/UX, Algorithms for the People, Data Science, Logic for Systems, Deep Learning, Computer Vision, Computer Systems

WORK EXPERIENCE

Google — Software Engineering Intern

SUMMER 2020 / MOUNTAIN VIEW, CA

- Created feature for Environmental Insights Explorer to contextualize cities' GHG emissions by clustering similar cities using **K-Means** in **Python**
- Improved results with normalization, feature pruning, and PCA
- Designed schema in relational database and wrote a Flume upload script in C++

Brown University — Teaching Assistant

FALL 2018, SPRING 2020 / PROVIDENCE, RI

- TA for Intro to Object-Oriented Programming and Computer Vision
- Held office hours, graded projects, worked on course development, and led sections

Google — Engineering Practicum Intern

SUMMER 2019 / IRVINE, CA

- Built tool to automatically clean up code and improve developer productivity
- Used **Java Static Analysis** on **Abstract Syntax Trees** to refactor dead code from obsolete boolean flags
- Used **SQL** to find a flag's referencing files in the code base to run the refactoring on

LEGO Education — Front-End Innovation Intern SUMMER 2018 / BILLUND, DENMARK

- Created iterative mockups using **Sketch** to improve UI/UX of lesson plans website
- Designed Mindstorms features and lesson plans to better engage girls in STEM

PROJECTS

Climate Tweets and Recycling Behavior — Python, 3 Partners SPRING 2020

Used the Twitter API to query tweets, processed all the data with Pandas, then used Pearson coefficients and multiple linear regression to analyze relationships

Music Generation — Python, 1 Partner

FALL 2019

Created a TensorFlow model to generate original music after training on famous classical pieces using LSTM networks

Shell— C, Individual

FALL 2018

Wrote a shell from scratch using a REPL; handled multiple processes, file redirection, and signal handling

SKILLS

Languages — Java, Python, C, HTML/CSS, Javascript, SQL, C++

Software — TensorFlow, Pandas, D3.js, React, GCP, GitHub

Design — Adobe Creative Suite, Sketch, Figma, InVision

LEADERSHIP

Design for America — on a project working to close the gender gap in CS, focusing attention on local Providence middle and high schools

Ivy Film Festival — as the Web Coordinator, lead the web team in managing our website and mobile apps

The Percentage Project — work on raising awareness around the experiences of underrepresented minorities in the Brown CS department through data collection and visualization

Women in Computer Science -

mentor underclassmen interested in pursuing CS and participate in community events

INTERESTS

Environmental sustainability, social impact tech, Design Thinking, photography, National Outdoor Leadership School (NOLS), rock climbing!