Alessa Somer

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Education

Williams, MA **Williams College** **Fall 2021 – May 2025**

- B.A: Data Science
- Relevant Coursework:
    - Machine Learning, Natural Language Processing, Algorithms, Advanced Programming and Data Structures
    - Statistics: Advanced Statistical Inference, Probability, Regression Theory, Introduction to Statistics
    - Other: Econometrics, Linear Algebra, Microeconomics, Macroeconomics, Discrete Math, Computational Math, Cognitive Science
- Teaching Assistant for introductory and upper-level CS courses over five semesters
- Activities include Williams Investment Group, UniCS Board Member (Underrepresented Identities in Computer Science), WSO (student run website for Williams College)

Employment

Software Engineer, Intern **Google** **Summer 2023 and 2024**

Ads Team

- Developed the front end of a new filter chips on the Advertiser Platform's recommendation page using Dart, Java, HTML and CSS which has since rolled into production for millions of users
- Designed and implemented a close feature for dialog boxes for the Ads Optimization Team
- Fixed ten bugs on the Ads API using Java

STEP (Engineering) Intern **Google** **Summer 2022**

Android Automotive Team

- Created a UI for the Ultrawideband team to visualize the location technology of an innovative bluetooth tool using Android Studio, Blaze, Java, and XML
- Completed the development process, including writing design docs, implementing, creating espresso tests, and rolling out UI
- Attended several Android Auto conferences and presented my UI to teams

Software Engineer **CACI International Inc** **Summer 2021**

Computer and Information Technology Company

- Created a Javascript Web App that validates different data fields from a circuit board to be used by electrical engineers within the company
- Worked with Vue.js, Vuelidate, Node.js, and Gitlab
- Created 10+ custom validators in Javascript

Programming Consultant **Plexus Notes** **November 2021 – February 2022**

Plexus is a smart note-taking startup founded by a Williams College alumnus

- Created Chrome extension to improve the usability of Plexus
- Consulted on the rollout of Plexus to the Williams College community

Projects

- **ML Diabetes Prediction Tool:** Created a random forest model to predict diabetes diagnoses based on several easily self-diagnosable conditions. Available Here.
- **Regression Model for Cholesterol**: Created a regression model to investigate the relationship between human behaviors and bodily LDL concentrations using the NHANES database.
- **Neural Network for Hijacked Tweets**: Created a deep averaging network (DAN) to detect whether a Tweet using a specific hashtag has been "hijacked" or used for spamming purposes. I present a Deep Averaging Network (DAN) as our classifying method and find that this model performs accurately on #MeToo Tweets. Created a dataset composed of human-labeled #coronavirus Tweets, and examined the performance of our DAN on these tweets. Available Here

Languages and Technologies

- Javascript/Typescript, Python, Dart, HTML + CSS, Java, C, R, Stata, SQL, Git
- Vue.js, React, Scikit-Learn, PyTorch, SolidJS, REST APIs