Abigail Bartolome

DATA SCIENCE | HUMAN-CENTERED COMPUTING | APPLIED MACHINE LEARNING

OBJECTIVE

To obtain a full-time position in **data science** where my skills in **problem-solving**, experience in **data science and machine learning**, and enthusiasm for understanding **human behaviors** can be leveraged to improve user experience and support **data-driven decision-making** in driving business objectives.

EXPERIENCE

GRADUATE RESEARCHER, DARTMOUTH COLLEGE | AUGMENTED HEALTH LAB

2019—2023

As a data scientist, I analyze user data from pervasive wearable devices to extract latent patterns in digital biomarkers and model user behavior. I have worked with time-series and multimodal datasets from patients with diabetes to identify patterns in diabetes management[1] and discover digital biomarkers of glycemic control[2]. My responsibilities include:

- Leading **data cleaning** on the lab's datasets, conducting the initial **exploratory data analysis**, and preparing **data visualizations** to present the new dataset to the lab
- Applying data mining protocols to identify key features and preparing such data for further analysis and **applied machine learning**
- Designing and developing tools and frameworks to support data-driven diabetes management

INSTRUCTOR, VIRGINIA TECH | INTRO TO SOFTWARE DESIGN

Jul 2018

Taught a joint introductory software design course for a summer session.

AUTOMATION ENGINEERING INTERN, INTEL

2014—2017

- Co-op May 2014—Jan 2015. Returned summers 2015, 2016, 2017
- Optimized team productivity by refactoring legacy tools and automating workflows
- Developed a tool that automates tool auditing

CONTACT

bartolomeabigail@gmail.com
(757) 927-4633
abijbart.github.io
linkedin.com/in/abigailbartolome
Lebanon, NH

EDUCATION

DARTMOUTH COLLEGE, 2023

MS, Computer Science

VIRGINIA TECH, 2018

MS, Computer Science & Applications

VIRGINIA TECH, 2016

BS, Computer Science
Minor in Mathematics

TECHNICAL SKILLS

Machine Learning: Classification, Feature Selection, Topic Modeling, Text Feature Extraction, Clustering

Python (noteworthy libraries: Pandas, Scikit-Learn, Numpy, SciPy, Statmodels)

Object-oriented programming (Java, C)

Exploratory Data Analysis

Data Visualization (Matplotlib, Seaborn, Plotly, Dash)

User-Experience Design**, User Studies**

Unix operating system, **Bash** scripting, **LaTeX** typesetting

Google Cloud System

Firebase

Additional programming languages: React-Native, R, Perl

[1] Bartolome, A., Shah, S. & Prioleau, T. (2021). Glucomine: A case for improving the use of wearable device data in diabetes management. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 5(3).*

[2] Bartolome, A., & Prioleau, T. (2022). A computational framework for discovering digital biomarkers of glycemic control. *NPJ Digital Medicine*, *5*(1), 111.