Abigail Bartolome

DATA SCIENCE | HUMAN-CENTERED COMPUTING | APPLIED MACHINE LEARNING

I am seeking 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.

I hold 10 years of professional experience, 4 years as a data scientist, and 3 degrees in classical computer science.

PROFESSIONAL EXPERIENCE

DATA SCIENTIST, AUGMENTED HEALTH LAB | DARTMOUTH COLLEGE

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

TEACHER, VIRGINIA TECH & DARTMOUTH COLLEGE

2016-2023

- Instructor for *Intro. to **Software Design*** in Summer 2018
- Graduate Teaching Assistant for *Software Design and **Data Structures**, **Problem Solving via Object-Oriented Programming**, Software Design and **Implementation**,* and *Data Science for Health*

AUTOMATION ENGINEERING INTERN, INTEL

2014—2017

- Co-op 05/2014—01/2015, returned summers 2015, 2016, 2017
- **Developed** a tool to **automate** design evaluation, refactored/maintained internal tools, and **automated** legacy workflows

CONTACT

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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

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[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.