Axusmawe A. Asmelash

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EDUCATION

Data Science & Political Science — *Bachelor of Science*   EXPECTED GRADUATION - MAY 2025
Center for Data Science & College of Arts and Science
Boston University, Boston, MA

- **Relevant Coursework**: Data Structures & Algorithms, Fundamentals of Computer Science, Machine Learning and A.I., Linear Programming, Linear Algebra, Machine Learning in Rust & Python, Introduction to Computing

WORK EXPERIENCE

Dimensional Fund Advisors — *Software Engineering Intern*   JUNE 2024 - AUG 2024
- Built Asset Database, a real-time data management system for 10,000+ desktops & servers with Python, **Django**, and SQL
- Reduced security anomaly analysis time by 67% by centralizing asset info using **TypeScript** and Angular GUI
- Accelerated software adoption by upper-management team by deploying intern project in Docker & Redis

Boston University Spark! — *Frontend Designer* 🔗   OCT 2023 - MAY 2024
- Partnered with 8 software engineers and 3 designers to design 4 web applications for institutions in Boston
- Led development of District 7, a bulletin board app for city of Boston in Figma, ReactJs, and JavaScript
- Engineered 5 high quality and reusable web components applying **ReactJs** and Storybook for clients website expansion

Dimensional Fund Advisors — *User Experience Intern*   JUNE 2023 - AUG 2023
- Contributed to Dimensional.com, a core product for clients to access financial portfolios and interface with PMs
- Integrated accessibility considerations earlier in design workflows for a global website overhaul across 12 countries
- Generated a web scraper which scanned 120 links for accessibility issues employing Python, **NodeJS**, and Google API

TECHNICAL PROJECTS

Global Energy Sources — *Tableau Dashboard* Github   AUG 2024 - PRESENT
- Created a digital dashboard tracking renewable energy consumption across world through **Tableau**

A.I. Song Generation — *HackMIT Project*   SEP 2024 - SEP 2024
- Led machine learning integration for a A.I. to generate songs based on **natural language prompts** and user preferences
- Utilized PyTorch, Tensorflow, and Librosa to analyze spectrograms and generate music

Turning Music into Math — *Machine Learning Classifer* Github   JUNE 2023 - JAN 2024
- Crafted a song similarity algorithm to pair songs together for seamless transitions by applying Spotify API data
- Engineered a Python script to analyze song features using seaborn, **scikit-learn**, and pandas

Pure Breath — *HackHarvard Project*   SEP 2023 - SEP 2023
- Produced a risk-point algorithm for users with respiratory illnesses, coding in Python to analyze air pollutants

LEADERSHIP

Unity and Social Quality Initiative (Startup) — *Cofounder*   AUG 2022 - PRESENT
- Pitched Oasis, a digital mental wellness app to secure $250 in funding and mentorship from Innovate BU's Incubator Program
- Drove user acquisition for a rate-my-dorm website through effective marketing on Canva growing active users by 2x

Black Student Union — *Executive Planning Committee*   OCT 2022 - JAN 2024
- Forged partnerships with all 12 African and African American clubs on campus, resulting in 8 collaboration events
- Facilitated communication with UMOJA's 30+ group members to book events and allocate $20,000 in club funding

ACHIEVEMENTS

- Jopwell I+D Candidate |*Selected from 600+ candidates*
- Boston University Scholarship |*Awarded*
- QuestBridge Fellow & QuestBridge Scholar |*Selected 16 from 2,000+ applicants*
- Federal Foreign Language Academic Fellowship |*Awarded to 15 from 1,500+ applicants*

SKILLS

- **Languages:** Python (*PyTorch, Django, Flask*), JavaScript (*React, Angular*), TypeScript, Oracle SQL
- **Technical Tools:** AWS, Tableau, Figma, Docker, Redis, Git, Microsoft Suite, Excel, VMware