JULIA WEPPLER

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EDUCATION

Northeastern University, **Khoury College of Computer Sciences**   Boston, MA
Master's in Computer Science   September 2025 – May 2027
Boston College, **Morrissey College of Arts and Sciences**   Chestnut Hill, MA
Bachelor of Science in Computer Science, Minor in Environmental Studies   May 2025

WORK EXPERIENCE

Stockholm Environment Institute   Somerville, MA
Research Software Development Intern   *February 2025 – May 2026*
• Lead software development for automating or optimizing workflows in renewable energy policy and clean industry transitions research
• Interface with clients, draft project proposals, site maintenance of peer review internal submission system

Boston College   Chestnut Hill, MA
Software Engineering Teaching Assistant   *August 2024 – May 2025*
• Assist in grading and teaching software engineering principles and methodologies covered in class

Optum (United Health Group)   Basking Ridge, NJ
Software Engineering Intern   *June 2023 – August 2024 (Seasonal)*
• Improved data processing pipeline by converting from Databricks Notebooks to modularized jar files and preventing re-loading of dependencies and datasets throughout end-to-end flow, **reducing delivery time to client by 60%**
• Built a site feature using React for the cybersecurity department to integrate LLMs for easier graph database traversal
• Recognized as a **Standout Summer Intern**

Fenugreek Tech   Rockville, MD
IT Researcher and Developer   *February 2023 – May 2024*
• Developed and tuned financial forecasting model with >70% performance accuracy in backtesting simulations
• Designed and implemented user dashboard with additional data visualizations to support user understanding of incoming data for the model, as well as outputs

PROJECTS

F3-EPO   *June 2025*
• Produced an interactive modeling dashboard using React and D3 for policy analysts to explore equity-based phase-out scenarios
• Prototyped and iterated a scenario engine (R and SQLite) that recomputes pathways from custom assumptions; integrated with a LAMP deployment
• Designed interaction patterns (linked views, overlays, tooltips) to surface trade-offs and improve decision clarity

Custom Excel Add-In for Policies Database   *May 2025*
• Re-platformed a large research database from a shared workbook to a hybrid relational/EAV model on Azure SQL, eliminating merge conflicts and enabling multi-user writes
• Built a custom Excel Add-In to perform SQL queries for automatically retrieving and updating data, tracking version changes, and handling merge issues

Data Ingestion Pipeline for Leadership Group for Industry Transition   *February 2025*
• Built a production pipeline that crawls news/press releases and uses LLM prompts to extract project attributes and sentiment for global green-steel/iron tracking
• Orchestrated weekly runs and delivery to OneDrive via GitHub Actions + Microsoft Graph; added traceable snippets for human-in-the-loop review.

Involvement

Society of Research Software Engineers – US Chapter   *April 2025 – Present*
• Participate in community calls to stay updated on emerging technologies to support research, network with industry experts, and present my own work for feedback

SKILLS

Technical: Python, Java, Javascript, HTML, CSS, C, Esri ArcGIS, Tableau, Azure SQL, Azure App Services, Apache, MongoDB, Microsoft Graph, GitHub, Agile Development, OOP, Linear Regression, XGBoost, D3, Plotly, Altair
Research: Task analysis, user studies, communicating with clients