Daniel Weber

dweber11@jhu.edu | 917.200.7111 | 184 Ardmore Ave, Staten Island, NY 10314

EXPERIENCE

AMAZON.COM | Software Engineer Intern

May 2021 - Aug. 2021 | Seattle, Washington

- Designed and implemented a heap dump analysis tool to aid developers in the optimization of processes utilizing over 250GB of heap memory.
- Collaborated with key stakeholders on the ad infastructure team to find the pain points in the existing optimization process.
- Implemented automation to give developers easy access to up-to-date heap dump files, shortening an 8 hour process to a minutes long task.
- Leveraged continuous development/integration to develop an extensible and resilient platform that can evolve with changing business needs.
- Technologies: Java, AWS, CodePipelines, Git

ZENNER | Machine Learning Intern

May 2020 - Sept. 2020 | Tel Aviv, Israel

- Created a high performance NLU chatbot that enabled customers to seamlessly manage their travel experience.
- Integrated with travel industry APIs to predict flight delays and proactively notify customers.
- Technologies: Python, Javascript, Tensorflow, Rasa, Docker, Google Cloud

DAVID ENERGY | Machine Learning Engineer

July 2019 – Sept. 2019 | Brooklyn, New York

- Curated an extensive dataset of electricity usage predictors from both internal and external sources.
- Developed machine learning models to predict a building's electricity demand with 97% accuracy and deployed said models to allow for real-time prediction and scalability.
- Architected an AWS cloud solution to allow the company's resources to scale with demand.
- Technologies: Python, Git, Tensorflow, Scikit-Learn, AWS

STUDENT INVOLVEMENT

SPIRE - RESILIENCY FOR THE US POWER GRID

Jan. 2021 – May 2021

- Performed red-team attacks against SPIRE, a distributed system which aims to build a US power grid that is resilient to cyberattacks.
- Demonstrated a resource consumption attack capable of taking the system down in under 20 minutes.
- Worked with the Department of Defense on further attacks and mitigations.

TA - ALGORITHMS/COMPUTER SYSTEM FUNDAMENTALS

Sept. 2020 – October 2021

- Taught students key algorithmic concepts like complexity analysis, dynamic programming, and graph traversal while holding office hours and grading HW.
- Educated students in low-level computing concepts like data representation, memory safety, and parallelism while performing code reviews.

PUBLICATIONS

[1] D. Avtanski, A. Lavi, K. Bahl, M. Kaiser, D. Weber, et al. Proinflammatory cytokines modulate resistin expression in breast cancer cells. *Endocrine Society*, 2019.

[2] D. Weber et al. Resistin induces epithelial to mesenchymal transition (emt) in breast cancer cells through activation of axl tyrosine kinase receptor. *Journal of the Endocrine Society*, 2019.

EDUCATION

JOHNS HOPKINS UNIVERSITY

BS Computer Science
BS Applied Math and Statistics
BA Pure Mathematics
Expected May 2023 | Batimore, MD
Whiting School of Engineering
Cum. GPA: 3.97 / 4.0 Major GPA: 4.0

LINKS

Github:// **danielkweber**
LinkedIn:// **daniel-k-weber**
SPIRE:// **Attack Demonstration**

COURSEWORK

UNDERGRADUATE

Introduction to Algorithms
Data Structures
Computer System Fundamentals
Honors Discrete Math
Honors Linear Algebra
Intro to Optimization
Computer Graphics
Honors Multivariable Calculus

SKILLS

LANGUAGES

Python | Java | C | C++ | Go | Javascript | Matlab | SQL | LaTeX | x86 Assembly

TECHNOLOGIES

Git | AWS/Google Cloud | Docker | OOP | Node.js | Express.js | Django | MongoDB | Postgre | TensorFlow

HOBBYS/INTERESTS

Cycling | Hiking | Coffee Drinking | Concertgoing | Piano Playing

CERTIFICATIONS

Dean's List | AWS-Certified