# 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.
- Leveraged continuous development/integration to develop an extensible and resilient platform that can eveolve with changing business needs.
- Implemented automation to give developers easy access to up-to-date heap dump files, shortening an 8 hour process to a minutes long task.
- Technologies: Java, AWS, CodePipelines, Git

#### **ZENNER** | Machine Learning Intern

May 2020 - Sept. 2020 | Tel Aviv, Israel

- Developed 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, Git

#### **DAVID ENERGY** | Machine Learning Engineer

July 2019 - Sept. 2019 | Brooklyn, New York

- Designed and curated an extensive dataset of electricity usage predictors from both internal and external sources.
- Created 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 comapany'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 - DISCRETE MATH/COMPUTER SYSTEM FUNDAMENTALS

Sept. 2020 - May 2021

- Taught students low-level computing concepts like data representation. memory safety, and parallelism while performing code reviews.
- Performed teacher's assistant duties for the Honors Discrete Math Course including teaching recitation, holding office hours, and grading homework.

# **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  $\mathbb{C}++$ Go Javascript | Matlab MT<sub>F</sub>X x86 Assembly

#### **TECHNOLOGIES**

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

### **SOFT SKILLS**

Communication Leadership Project Management Office Suite

# **CERTIFICATIONS**

Dean's List **AWS-Certified**