DANIEL HU

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https://dhu5432.github.io/

EDUCATION

Purdue University *West Lafayette, Indiana*
M.S. in Computer Science (GPA: 3.60) August 2019-May 2021
B.S. in Computer Science (GPA: 3.66) August 2016-May 2020

WORK EXPERIENCE

Microsoft Seattle, Washington
Software Engineering Intern *May 2020-Present*

Capital One Richmond, Virginia
Software Engineering Intern *June-August 2019*

- Utilized the PySpark framework to create a matching algorithm to identify potential Capital One customers affected when an external third party data breach occurs.
- Built a contained environment using a variety of AWS services (Lambda, Elastic MapReduce, and S3) to execute the matching of data provided by the external third party (i.e. Equifax) against internal tokenized customer data.
- Reduced data and security vulnerabilities by removing the need for a human to examine sensitive PII.

CME Group (Chicago Mercantile Exchange) Chicago, Illinois
Software Engineering Intern *May-August 2018*

- Leveraged the Moto/Boto3 and Pytest frameworks to create a substantial unit test suite to validate CME's Cloud Custodian (open source rules engine for AWS fleet management) policies.
- Implemented new functionality of the CME automation framework in Python to integrate with the Cloudbolt (a hybrid cloud management platform) API to provide a uniform mechanism for automatic provisioning of servers in an on-premise environment.

Purdue University West Lafayette, Indiana
Undergraduate Teaching Assistant (Digital Literacy) *January-May 2019*

- This course is a comprehensive introduction to the digital world, providing a high level overview to technologies such as computers, the internet, the cloud, etc. It concentrates on how computing affects students' lives.
- Created and graded homework assignments and exam questions for students.
- Held office hours to help students understand difficult course material.

PROJECTS

GitStarter April 2018
https://github.com/dhu5432/GitStarter

- A web application that allows users to "invest" in Github repositories.
- Utilizes the GitHub API to determine value of a project based on commit activity.
- Balance history and value of repositories can be visually seen through graphs.

PUBLICATIONS

Henry, C., Hu, D. and Bagchi, S. The Effect of Motion on PPG Heart Rate Sensors. IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2020)