DANIEL HU

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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

Purdue University West Lafayette, Indiana
Graduate Teaching Assistant (Compilers: Principles and Practice) *August 2020-Present*

Microsoft Redmond, Washington
Software Engineering Intern *May-August 2020*

· Created a GraphQL endpoint in C# for the Azure Resource Graph, providing customers with an alternative querying experience.
· Integrated the endpoint with the Azure Resource Manager, allowing customers to modify data related to their Azure resources using GraphQL.
· Cached data from backend requests using a design similar to GraphQL's dataloader pattern.

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.

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.

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.

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)