

Chabrielle Allen

6350 Main St., Box 120
Houston, TX 77005
(575)914-2020
caa6@rice.edu

EDUCATION

Bachelor of Arts in Religion
Rice University – Houston, TX
AUG 2016 – AUG 2020

WORK EXPERIENCE

Software Engineering Intern
Microsoft, Office 365 (O365) Core Insights, Data Engineering, & Analytics (IDEAs) Team – Seattle, WA
MAY 2019 – AUG 2019

- Wrote detailed technical spec outlining pipeline process, data points for analysis, and goals and work items of overall project.
- Developed telemetry data pipeline for Lynx, an internal portal that Microsoft employees use to track tenants' O365 subscriptions and usage, using Azure Blob Storage, Azure Data Lake Storage, Cosmos DB, Azure Data Factory, Databricks, and DataBuild.
- Implemented C# processors to read data, Scope scripts to aggregate and analyze data, and administrator page in Lynx website presenting user behavior analyses based on telemetry data using React.js, Redux, and TypeScript.

Explorer Intern
Microsoft, O365 Core Security Engineering Team – Seattle, WA
MAY 2018 – AUG 2018

- Developed technical spec outlining pipeline process, work items, data points for analysis, and goals for prototype.
- Presented data from CIS (Center for Internet Security) configuration scans and STIGs (Security Technical Implementation Guides) to allow teams across Microsoft to view vulnerabilities in configurations of hosts running O365.
- Developed the schema for and used C# to normalize and insert data into a SQL Data Warehouse.
- Pushed data from the SQL Data Warehouse to Azure Analysis Services to create relationships within the data and connect to Power BI for presenting.

Bioinformatics Research Assistant
Rice University Data Sciences Student Program (RUDSSP) – Houston, TX
MAY 2017 – MAY 2018

- Developed a front-end tool, [ALPHA](#), for the analysis and visualization of large DNA data in the form of phylogenetic trees using Python.
- Created graphics displaying statistical analyses and comparisons using analysis software such as BioPython, Dendropy, ETE Toolkit, PhyloNet, PyQt, and RAxML.
- Ran simulations to develop and confirm a generalized D-statistic using MakeSample (MS), Seq-Gen, and ALPHA.
- Wrote detailed documentation for downloading and using ALPHA.

LEADERSHIP EXPERIENCE

Coordinator
Hanszen College Night/Crane Day Committee, Rice University – Houston, TX
AUG 2017 – CURRENT

- Plan, publicize, and host events celebrating Hanszen culture and facilitating bonding between students at Hanszen.
- Manage budget and document details of itineraries, food/drink sources, layout of the event, volunteers, and backup to ensure the safety of the event.
- Oversee team of coordinators and volunteers and communicate their roles in College Night.

RELEVANT COURSEWORK

Computational Thinking
Cross-Training in Data Science
(Research)
Algorithmic Thinking & Discrete Math
Computer Science Projects
(Research)
Intro to Object-Oriented Programming
Ethics & Accountability in CS
Web Development
Human-Computer Interaction (*In Progress*)

LANGUAGES

C#	C++
CSS	Command Line
HTML	JavaScript
Java	Python
React.js	Redux
Scope	SQL
TypeScript	

SKILLS

Azure Services
GitHub
Power BI
SQL Server Management Studio

PAPERS

[DGEN: A Test Statistic for Detection of General Introgression Scenarios](#)

[ALPHA: a toolkit for Automated Local Phylogenomic Analyses](#)

EXTRACURRICULARS

Rice QuestBridge Chapter, College Government, Intramural/Club Basketball

AWARDS AND HONORS

QuestBridge Scholar – DEC 2015
Received a full-ride scholarship to Rice University based on high academic achievement and community and school involvement.