Ai Chen

aic2@andrew.cmu.edu | +1 9172398763 | 632 Bellefonte St Apt 5, Pittsburgh, PA, 15232

EDUCATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Carnegie Mellon University** | | Pittsburgh, PA | | |
| *Master of Information System Management; GPA: 3.89/4.0* | | | *Expected Dec 2020* | |
| **Relevant Coursework:** | Cloud Computing(15-619), Distributed Systems, OOP in Java, Database Management, Intermediate Statistics | | |  |
| **Wuhan University** | | Wuhan, China | | |
| *Bachelor of Information Management and Information System; GPA: 3.69/4.0* | | | *Sep 2015 – June 2019* | |

SKILLS

|  |
| --- |
| * **Programming and Databases:** JAVA, Python, HTML5, CSS, SQL(Oracle, MySQL), MongoDB, HBase |
| * **Tools and Frameworks**: AWS (EC2, S3, EMR), Azure, Terraform, Docker, Kubernetes, Bootstrap, Maven, Git, GitHub Actions |

WORK EXPERIENCE

|  |  |  |  |
| --- | --- | --- | --- |
| **TEEL Lab** | | Pittsburg, PA | |
| *DevOps Engineer Intern* | | | *May, 2020 – Present* |
|  | * Developed online tutorials and hands-on practices for Azure DevOps and GitHub Actions with auto-grading. | | |
|  | * Created a schema with JSON schema to define the grading matrix. | | |
|  | * Implemented IaC solution with Terraform 0.13 to manage Azure VM cluster, which carry the self-hosted GitHub Actions runner and support on-create auto-register and on-destroy auto-deregister. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Tianfeng Securities Co. ltd.** | | Wuhan, China | |
| *Data Engineer Intern* | | | *Oct, 2018 – Jan, 2019* |
|  | * Analyzed, classified, and consolidated 3.19 GB transaction data with Python Data Analysis Library (pandas), and created visualizations with Python matplotlib and ECharts. | | |
|  | * Analyzed the transaction database and proposed suggestions for the new database schema. | | |

PROJECT EXPERIENCES

|  |  |  |
| --- | --- | --- |
| **Social Networking Web App with Heterogeneous Backends** | | *Mar, 2020* |
|  | * Developed backend Configure, populate and deploy MySQL and MongoDB databases for a social network web service, supporting user login authentication and user comment timeline generation. | |
|  | * Orchestrate and manage complex cloud architecture with heterogeneous database backends using Terraform. | |
|  | * Design effective database schema and created the database. Design and develop efficient database queries using the Java API for databases. Write complex queries to fetch data to support the functions | |

|  |  |  |
| --- | --- | --- |
| **Fitness App Design** | | *March, 2020 – Mar, 2020* |
|  | * Designed a data model of 3NF that limited redundancy and enforced data integrity following organizational requirements and implemented the data model in Oracle 18c. | |
|  | * Created reports based on transactional data, including elements such as data grouping, analytical functions, and summarizations. | |

|  |  |  |
| --- | --- | --- |
| **Twitter User Recommendation Web Service Development** | | *Feb, 2020 – Mar, 2020* |
|  | * Cooperated with a team of 3 to develop a web service which recommends friends for a given user based on retweet and reply interactions and tweet similarities. | |
|  | * Designed RESTful APIs to handle the heartbeat request and recommendation request, and optimized with Intellij Profiler to reach the RPS of 34000 and 12000 repectively. Deployed with AWS ELB to enable the scalability of the service. | |
|  | * Implement ETL process on a 1TB data set and load the data into MySQL and HBase to support the service. | |

|  |  |  |
| --- | --- | --- |
| **Web-based Group Chat Service with GCP and Azure** | | *Jan, 2020 – Feb, 2020* |
|  | * Developed an online web-based group chat application using Spring, implemented with microservices architecture, including login management, profile management and chat management. | |
|  | * Containerized the services with docker and deployed to GCP and Azure. Managed Kubernetes clusters with Helm. | |