# THOMAS THURAIN TUN LIN

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#### **EXPERIENCE**

#### AMAZON – Software Development Engineer, Business Data Technologies

AUG 2021 - AUG 2023

- Implemented key features on a highly scalable solution, ensuring seamless integration with existing systems while maintaining feature parity with legacy application managing orchestration for ETL jobs
- o Incorporated and backfilled a full-text search engine to parse system data and logs, reducing engineer overhead during on-call duties, and enhancing future implementations regarding filtered system jobs
- o Designed and executed rigorous load tests to evaluate performance/scalability under various conditions
- Spearheaded the migration of ~550 users off deprecated technologies, ensuring feature parity, cost-savings, and continued service throughout the migration
- o Handled weekly on-call responsibilities, ensuring system availability for ~500 daily jobs, .

## AMAZON - SDE Intern, Business Data Technologies

JUN 2020 - AUG 2020

- o Designed and implemented a REST API that works with an SQL layer, enabling 400+ users to map their permissions through a system user and removing the dependency on a customer's permissions
- o Wrote comprehensive internal and customer-facing documentation that outlines the implemented feature
- o Collaborated with internal teams to analyze customer needs and wants, allowing delivery 2 weeks early

### CMU CS ACADEMY - Development Team

MAY 2019 - AUG 2019

- o Revamped front-end design to improve navigation for use in 6000+ classrooms across the world
- Built prototype of image autograding script with a pixel-by-pixel algorithm to provide more accurate feedback and a visual representation of the programming errors
- o Collaborated with teachers and teams across Pennsylvania to design coding challenges and competitions

#### NEXLABS - Software Engineering Intern

JUN 2018 - AUG 2018

o Developed features for an app that connects devices to streamline office logistics and communication

## **EDUCATION**

CARNEGIE MELLON UNIVERSITY – B.S In Computer Science, Minor in HCI

AUG 2017 - MAY 2021

## **RELEVANT COURSEWORK:**

Functional Programming, Computer Systems, Human AI Interaction, Machine Learning, Parallel & Seq Data Structures, Algorithm Design, Foundations of Programming Languages, Parallel Compiler Architecture, Interaction Design, Human Centered Software, Software Structures for User Interfaces, Natural Language Processing,

#### PERSONAL PROJECTS

#### AI PROJECTS

- o SammyBot a chatbot dynamically responding to Twitter replies trained on a text dataset about CMU
- o GestureRecognizer a gyroscope based script trained to identify arm gestures while holding phone
- o MovieRecommender a script that uses genre, cast, and mood to generate movie recommendations based on user preferences

#### ANDROID GAME DEVELOPMENT

o (Various, In Progress) - Reevaluating the way people interact with mobile games through the tenants of Human Computer Interaction and building key systems to reimagine the mobile gaming space

#### **SKILLS**

o Java, Javascript, React, Python, C++, SQL, NoSQL, AWS, HTML/CSS, Unix, Git