ANH QUAN CHAU

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INDUSTRY EXPERIENCE

Software Engineer, **NUTANIX**   *San Jose, CA*   *June 2020 – Present*

- Responsible for artifact storage system for internal development, **storing 15M+ artifacts including generic, Docker, NPM, PyPI and Helm artifacts**
- Manage a mesh of **3 artifact storage instances** in different regions running on AWS EC2 with active/passive pull replication
- **Redesign Airflow deployment using Helm chart and Kubernetes** to provide 99.9% uptime with **logging using fluentd/Elasticsearch and metrics monitoring with Prometheus**
- Build test management services that provide test run functionality, milestone management and quality index for **10+ product teams and 30,000+ test cases**

Software Engineering Intern, **NUTANIX**   *San Jose, CA*   *May 2019 – Aug 2019*

- Implement **two large-scale workflows that onboard company-wide releases/patches**, improving the duration **from 3-5 days to 25 minutes**
- Handle concurrency updates between workflows and dependency issues between **70+ tasks** to allow users to run tasks in parallel and re-trigger tasks
- Collaborate with 6 internal teams to optimize API calls, data consistency and enforce single source of truth

Software Engineer, **SHOPKICK**   *Redwood City, CA*   *Sep 2018 – May 2019*
Software Engineering Intern   *May 2018 – Aug 2018*

- The only engineer building out **a new in-house Receipt Transcription System**. I evaluated MySQL vs Cassandra for this use case.
- Ship the system in production, **improving the Receipts Award Rate at Shopkick to above 80%, compared to 50% as before**
- Work with 10+ offshore employees to improve the transcription process of **1000+ receipts** a day

Software Engineering Intern, **RETURN LOGIC**   *Carlisle, PA*   *Feb 2018 – May 2018*

- Build the first company's **React UI library with 8+ reusable, responsive components**
- Transform the company's internal control center into a mobile-friendly website

PROJECTS

CONNECT 4   *www.connect4bot.com*   *Feb 2019 – May 2019*

- Build a **server-client network application** that allows multiplayer
- Implement **multi-threading** to keep track of multiple game sessions at the same time
- Implement an AI-bot player with 5 levels of difficulties using **Minimax with Alpha-beta pruning and an efficient heuristic function**

THE BEST WAY TO WEB APP   *github.com/quanchau/tbwt*   *May 2018 – Dec 2018*

- Build a web platform using **React and Express.js with MongoDB**
- Create an authentication system with encrypted password and access token for Swagger API authentication

GURU REACT NATIVE APP   *github.com/quanchau/guruApp*   *Dec 2017 – May 2018*

- Build a React Native app that connects users with book reviews and suggestions based on interactions
- **Apply Firebase and Amazon S3 to store user data, metadata and objects**
- Develop a scanner obtaining ISBN from barcode and enable user to make purchases from Amazon through AWS Affiliate API

EDUCATION & ACHIEVEMENTS

Dickinson College, *Carlisle, PA*   **Class of 2020**
Bachelor of Science, Computer Science (Major), Mathematics (Minor)   Major GPA: **4.0**

- **1st Prize at Shippensburg site in ACM-ICPC Mid-Atlantic Regional Contest November 2018**
- **1st Prize Dickinson Spring Programming Contest 2018, 2019**: Competed with 15 teams from top colleges across Pennsylvania

Honors Research: Analysis of Transport Layer Congestion Control Algorithms in 5G Millimeter-Wave Networks

- Simulate scenarios and analyze the performance of each Congestion Control algorithm when the user device moves through Line-Of-Sight (LOS) and Non-Line-Of-Sight (NLOS) conditions

LANGUAGES & TECHNOLOGIES

- Java, Python, Javascript, C++, Bash, SQL, CQL
- Kubernetes, Docker, Helm, MySQL, SQLAlchemy, Postgresql, MongoDB, Cassandra, Apache Airflow, Apache Thrift
- Django, Node.js, Swagger API, React.js, React Native, Bootstrap, jQuery