# Chingyuan "Alan" Yang

U.S. Citizen w/ public trust • Mclean, VA (Open to Relocation)

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#### PROFESSIONAL SUMMARY

Full Stack Software Developer with over 4 years of experience building cloud-native applications, backed by 8 years in the IT industry. Proficient in React (TypeScript), Java Spring Boot, and Oracle databases. Skilled in developing RESTful APIs, implementing microservices, and delivering scalable backend systems processing millions of records monthly. Adept in Agile Scrum, and accessibility standards for enterprise and government web applications. Strong background in system performance optimization, cross-functional collaboration, and end-to-end software development lifecycle. Holds a Master's in Computer Science with advanced knowledge of distributed systems.

Certifications: AWS Certified Developer, Oracle certified professional, Java SE 8 programmer, Oracle certified associate, Java SE 8

#### **PROFESSIONAL EXPERIENCE**

### Full Stack Software Developer | Booz Allen Hamilton | Mclean, VA | 11/2022 – Present | React.ts, Java Spring Boot, Oracle DB

- Enhanced key modules of a large-scale Content Management Tool (PDF editor) using React TypeScript, Java Spring Boot, tailwind CSS, and LESS CSS, and the iText PDF library; implemented complex features like conditional logic, custom objects and XML files output to AWS S3 bucket, enabling automated generation of over a million medical documents monthly.
- Refactored legacy JMS topics into secure RESTful APIs with JWT authentication, leveraging AngularJS and Spring Boot. Additionally, developed enhancements for AWS SQS integration and multiple Spring Boot microservices to efficiently fetch document metadata and process medical examination data, contributing to a high-throughput messaging system processing tens of millions of messages monthly.
- Developed and maintained database schemas using Liquibase for version-controlled updates to Oracle databases hosted in a Docker container; implemented custom SQL queries and leveraged Hibernate JPA to perform seamless ORM mapping, persisting Java objects to relational tables.
- Engineered comprehensive unit testing suites using Jest, React Testing Library, JUnit, and Groovy; ensured robust quality assurance via ESLint and Splunk for log tracing, and automated builds and deployments using Jenkins CI/CD pipelines.
- Contributed to system design efforts using the 4+1 architectural view model, helping create UML diagrams, workflow charts, UI/UX wireframes, and database schema designs; developed a prototype application to validate the "objects propagation across documents" solution.
- Worked in an Agile Scrum development to implement accessible front-end interfaces adhering to the U.S. Web Design System (USWDS) and Section 508 compliance standards for government web applications; ensured compatibility with JAWS screen reader as part of a system that contributed to significantly improved veterans-related government process efficiency.

### Full Stack Software Developer | Bridgestone/ Former Tyrata Inc | Durham, NC | 6/2021 – 11/2022 | Vue.js, Python, bash, GCP

- Utilized Vue.js, Python, and Lodash to implement 4 major enhancements to the web application, including Service Worker based offline-capable notifications and email integration, user management, client info organization, and maintenance record tracking.
- Developed 30+ backend APIs to support firmware and web app requests, leveraging Google Firestore, a document-based non-relational database to handle dynamic tire data and real-time notifications, enabling a highly responsive user experience.
- Improved website response time by 50% by refining data structures and designing a more efficient JavaScript binary search
  algorithm based on alphabetical order. Boosted processing speed by 80% through the use of Google Pub/Sub, enabling multiple
  virtual machines to manage tire tread depth data notifications asynchronously and reliably.
- Developed bash scripts to automate firmware updates and perform logging tasks, ensuring consistent system performance and traceability. Applied pandas, NumPy, and Jupyter Notebooks to analyze Google Firestore data and perform consistent unit testing for reliability. Built complex Linux environments configured with Conda and various Python packages.
- Packaged Python applications using PyInstaller to manage dependencies and used PyArmor to obfuscate source code for enhanced security and portability. Utilized Electron framework and Python flask to develop windows desktop applications that accurately identified and analyzed tire tread depths.
- Enhanced the web interface and data visualizations using Plotly.js and LeaderLine, Improved usability and user experience for systems managing an average of 1,800 tires and 300 vehicles per major logistics and e-commerce client.

#### IT Supervisor/ IT Administrator | Foxconn Assembly/ Q-EDGE | Durham, NC | 2014 - 2018 | Oracle, Microsoft SQL

- Led a team of two IT members, collaborating with engineering team and management to discuss technical requirements, conduct
  acceptance testing demonstrating strong communication and decision-making. Ensured full SDLC alignment and prevented
  system issues by 20% through enforcing workflow procedures and preventive actions to reduce human error.
- Utilized SQL to develop stored procedures, views and triggers in Oracle DB and Microsoft SQL Server to support production data analysis. Enhanced the Shop Floor Control System, reducing downtime by 60% and improving team efficiency by 30% through workflow optimizations, system debugging, and cross-functional collaboration.

## EDUCATION

Master of Science in Computer Science | Clemson University, Clemson, SC | 2019 - 2020 | GPA 3.93/4.0

Coursework: Distributed, Parallel, GPU programming, Relational Database, Linux Admin, Information Retrieval, Blockchain.

MBA in Information Management | Chung Yuan Christian University, Taiwan | 2010 - 2012 | GPA 3.82/4.0