James Huang

Seattle, WA | jamesxsj8441@gmail.com | 206-2618945
LinkedIn: https://www.linkedin.com/in/alvinhuangneu/ | GitHub: https://github.com/StarfishJ

EDUCATION

Northeastern University   **Sep 2024 – Jun 2026**
M.S. in Computer Science   **Seattle, WA**

Shanghai University   **Sep 2011 – Jul 2015**
B.A. in Economics   **Shanghai, CN**

Courses:

Linear Regression, Statistics & Probability, Data Structures, Algorithm, Object-Oriented Design, Database System, Distributed System

WORK EXPERIENCE

Omron Automation (China) Company Ltd.   **Jun 2020 - May 2024**
Project Engineer   **Shanghai, CN**

- **Client communication**: Drove client interest and satisfaction through in-person communication and secured up to $1M contracts.
- **Visualized data:** Reduced onsite presentation time by 50% by enabling direct **Power BI** dashboard access for real-time update.
- **Agile** Process Control: Led **Agile** workflows using **JIRA** ticket system, boosting daily task completion by 25%.
- **Test Automation**: Built a **Selenium/JUnit5** test framework, achieving 92% coverage and cutting post-release defects by 30%.
- **CI/CD** Optimization: Shortened sprint cycles from 3 to 2.2 weeks, reducing manual coordination efforts by 40%.
- **Kubernetes sandbox deployment:** Used **Terraform** to slash setup time by 65% and enabling 5+ teams to test concurrently.

STS Certified Ltd.   **Aug 2015 - May 2019**
Project Specialist   **Shanghai, CN**

- **Cross-team Data Governance**: Led workshops with lab/IT teams to standardize data schemas, reducing errors by 30%.
- Created scalable **ETL** workflows: Used **Python (Pandas** + **Dask**) for processing 500GB+ (CSV/JSON) datasets.
- Deployed dashboards: **Plotly Dash** dashboards with time-series aggregation and outlier highlighting, improving analysis time by 25%.
- Enhanced Monitoring System Visualization: Trained **time-series models** to forecast calibration needs and reducing critical incident.
- Introduced **Predictive Maintenance**: forecast calibration needs based on logs, preventing 5+ unplanned downtime events annually.

PROJECTS

Full-stack Distributed E-Commerce Platform (Microservices)
Stack: SpringCloud, MybatisPlus, RabbitMQ, Elasticsearch, Redis, AWS ECS, Amazon CloudWatch

The platform provides essential e-commerce functionalities, including User Authentication / Product Management / Order Processing / Payment Processing / Product Searching / High-traffic Flash Sales.

- Deployed 6+ **SpringCloud microservices** (Auth, Product, Order, etc.) on **AWS ECS**, monitored by **Amazon CloudWatch**.
- Optimized **MySQL** with **MybatisPlus** pagination and external caching, reducing query latency by 40% and handling 10K QPS.
- Designed **RabbitMQ** order pipelines (dead-letter queues + idempotent API) processing 1.2K/sec with 99% payment success rate.
- Prevented overselling via **Redis-Lua** locks, cutting API latency by 70%, supporting 5K/sec flash sales without stock errors.
- Implemented **OAuth2.0 + JWT** authentication across microservices using Spring Security, reducing unauthorized access incidents.

Front-end Interactive 3D Product Portfolio Website
Stack: React (Next.js), TypeScript, Three.js, Prismic, Tailwind CSS

The website supports a real-time 3D viewing of products from different angles by clicking on specific component.

- Developed **Next.js 3D** viewer (SSR + route-based splitting), reducing load time from 4s to 2s.
- Optimized **Three.js** pipeline (compressed GLTF + instanced meshes), 60 FPS on mid-tier devices, lifting engagement 35%.
- Automated 3D CMS via **Prismic** + custom React hooks, asset update cycle <1hr, cutting dev requests by 70%.
- Scaled UI with **Tailwind CSS** Modules, reusable component library, reducing styling bugs 80%.
- Implemented Web Workers for background **GLTF** parsing, zero UI freezes, improving scroll fluency by 45%.

CERTIFICATION

AWS Certified Solutions Architect – Associate   **Dec 2024**
Project Management Professional   **Jun 2019**

SKILLS

Programming Languages: Python (Proficient), Java (Proficient), C, JavaScript/TypeScript, HTML/CSS
Framework & tools: React, Next.js, Tailwind CSS, SpringCloud (Microservices), Node.js, REST, GraphQL, RabbitMQ, MybatisPlus
Databases & Storage: PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch
DevOps & Cloud: AWS (EC2/S3/Lambda/ECS/CloudWatch), Docker, Kubernetes, CI/CD (GitHub Actions/Jenkins)