Stanley Kim

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Education

Purdue University **August 2022 – December 2025**
Bachelor of Science in Computer Science; GPA: 3.61 *West Lafayette, Indiana*

- **Relevant Coursework**: Analysis of Algorithms, Software Engineering, Operating Systems, Relational Databases, Systems Programming, Software Testing, Data Structures and Algorithms, Computer Architecture
- **Awards**: Recipient of William C. Nylin Jr. Endowed Scholarship, Dean's List and Semester Honors

Experience

Amazon Web Services **May 2025 – August 2025**
Software Development Engineer Intern *Boston, MA*

- Designed a comprehensive tag and property filtering system for the FSx Console using TypeScript and React, supporting multi-resource filters with different operations, debounced search, client-side pagination, and URL support.
- Identified and resolved a tagging bug in the FSx API service endpoint, collaborated with back-end engineers on the fix, authored integration test cases, and contributed to console automated testing to validate tag-filtering across all FSx resource types.
- Enhanced the FSx Ops Console File System Create form to distinguish Quick Create and Standard Create flows by instrumenting CloudWatch metrics and integrating a React analytics chart to visualize usage trends.

Kohl's Technology **June 2024 – August 2024**
Software Engineer Intern *San Ramon, California*

- Optimized API product-monitoring services with Java, Spring Boot, and MongoDB, integrating with Mirakl marketplace platform and implementing in-memory pagination, leading to a 2–3 hour reduction in support time per sprint.
- Designed a data pipeline for products using Spring Batch and GCP, generating $3.5 million annually from monetization efforts, while engineering CI/CD pipelines with Docker and Kubernetes to automate deployments with 82% test coverage.
- Collaborated with engineers to refactor a Java microservice into a dedicated Kafka consumer service for handling updates from third-party platforms, enabling horizontal scaling and optimizing data ingestion.

The Data Mine - Purdue University **Aug 2023 – May 2024**
Research Project Lead *West Lafayette, IN*

- Organized and led weekly stakeholder meetings and sprint planning to align project objectives and managed 12-member agile team in delivering machine learning solutions for predictive maintenance of portable oxygen concentrators.
- Constructed Random Forest models in Python with scikit-learn, applying feature engineering and selection on 30+ sensor metrics from 700+ device data to accurately forecast oxygen concentration levels.
- Developed multivariate LSTM networks in TensorFlow/Keras with validation-loss callbacks to prevent overfitting, achieving 81% accuracy on a multi-month hold-out test set across diverse POC device profiles.

Comerica Bank **May 2023 – August 2023**
Technology Intern *Auburn Hills, Michigan*

- Developed Java microservices using Spring Boot to interact with SailPoint IdentityIQ APIs, automating onboarding and offboarding for over 75 applications, saving engineers an estimated 10 hours per month.
- Incorporated lifecycle event triggers to manage user onboarding, offboarding, and role changes, collaborating with HR to synchronize user attributes and roles across systems for over 5,000 employees using MySQL queries.

Projects

BoilerMarket | *React, TypeScript, Tailwind CSS, Python, Django, Firebase, MySQL, AWS*

- Engineered a full-stack online marketplace for Purdue students, implementing secure authentication, S3 media storage, and a real-time direct messaging system with threaded inboxes, live notifications, and session persistence.
- Enhanced user engagement by implementing search, filtering, and caching of search history, and verifying Purdue student authentication to enable secure, in-area, location-based transactions via Google Places API.

Healthcare Volume Forecasting Research | *Python, SQL, statsmodels, TensorFlow/Keras, scikit-learn*

- Preprocessed time-series data from SQL across 14 hospital sites through z-score normalization and min-max scaling, implementing Poisson, Generalized Poisson, and Negative Binomial GLMs in Python, benchmarking against a system-wide model.
- Engineered and hyperparameter-tuned LSTM models with TensorFlow/Keras to predict three-month surgery and inpatient volumes with 90% accuracy, presenting weekly to IU Health leadership.

Technical Skills

Languages: Java, Python, C, C++, JavaScript, HTML, CSS, SQL, Bash
Technologies: AWS, React, Spring Boot/Batch, MongoDB, Django, Next.js, PostgreSQL, Node.js, MySQL, Express.js, Flask, OpenShift, Kubernetes, Jenkins, Selenium, Google Cloud, Postman, Git, Docker, Kafka, Redis