

Spencer Huang

(724) 732 - 4299 | spencerhuang.netlify.com | spencerhuang147@gmail.com

EDUCATION

Master of Information Systems Management, Managing AI and Robotics
Bachelor of Science, Applied Computer Science

Carnegie Mellon University
Allegheny College

WORK EXPERIENCE

Software Engineer, Infrastructure IXL Learning

Dec 2023 - Present

- **[unification]** Spearheaded centralized monitorization across different IXL brands to Grafana increasing performance detection efficiency by 200%
- **[disaster recovery]** Streamlined issue recovery process of DB replicas reducing downtime by 50%
- **[web performance]** Led an engineering team in efforts to speed up slow request URIs by upwards of 66%

Software Engineer II, Groupon

Jan 2022 - Feb 2023

- **[containerization]** Led a team of engineers to migrate an internal tool onto Kubernetes with Docker increasing availability of the tool by 100%
- **[aws cloud]** Reduced 50% of project infrastructure costs by migrating on-premise servers to new AWS EC2 and RDS instances
- **[integration]** Implemented/Integrated a SOX compliance bot with Slack and an internal reporting tool
- **[scalability]** Engineered prototype from scratch for a new internal tool using microservices for scalability
- **[monitorization]** Defined new monitoring pipeline reducing debug time by 40%

Systems Engineering Intern, Groupon

May - Aug 2021

- **[performance enhancement]** Performed database testing through creation of PostgreSQL AWS RDS instances
- **[UI/UX]** Expedited the time needed for employees to gain access to resources through overhauling a UI/UX redesign of an internal tool using Flask and jQuery
- **[documentation]** Produced documentation for all pain points and the development process related to the internal tool to ease transition for future engineers

Software Engineer Intern, C&IB Innovations Team at PNC Bank

June - Aug 2020

- **[nlp]** Accelerated the time it takes to extract information from legal documents by 2 folds from developing and training a learning model using LexNLP and spaCy
- **[applied machine learning]** Implemented various prototype models for data extraction based on previous and ongoing researches which creates a basis for multiple possible research/development areas

PROJECT EXPERIENCE

[java | testing] Workout Simulator

- Developed a GUI based workout simulator using object oriented programming
- Used JUNIT testing suite to establish confidence in code functionality

[python | pip] Tada! auTomAtic orDer-of-growth Analysis

- Designed an tool that systematically finds worse-case time complexity for arbitrary Python functions
- Published the open-source tool onto PyPi

[python | api] Smile Detector

- Produced a tool that detects smiles through webcam using OpenCV, storing results with Dropbox API
- Trained model using haarcascade data file, shortening time needed to develop initial prototype

TECHNICAL SKILLS

Languages Python, Java, JavaScript, HTML

Frameworks/Libraries Django, Flask, React, Tensorflow, Keras, SciKit Learn, PyTorch, HaasCascade

ML/AI Neural Network, Linear Regression, Natural Language Processing

Databases MySQL, PostgreSQL

Operations Ansible, Docker, Nginx, Terraform, Jenkins, Kubernetes

Monitoring Grafana, Cloudwatch, Datadog, OpenTelemetry, OpenSearch, Kibana, Wavefront

Amazon Web Services EC2, RDS, SQS, Elasticsearch