Luxi Liu

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Experience

Software Engineer II (L5)　　　　Amazon Ring　　　　July 2022 – Present

- Productionized on-device AI detection models for 10+ million devices as part of Computer Vision team
- Designed and delivered API for industry-pioneering AI search feature allowing customers to smart search through captured images, with avg latency of <2000ms
- Responsible for the development and operations of key media services trafficking O(100k) TPS in images and videos. Experienced in designing, implementing and maintaining large-scale systems
- Led design and development of complex dynamic rate-limiting feature, improving device battery efficiency by 0.9% per charge cycle for ~4 million devices when operating in battery mode
- Collaborated across ten teams to transform overall backend architecture from event-based to time-based
- Led onboarding and 1-to-1s for three junior engineers on code quality and system design

Technologies used: Golang, Python, Java, Terraform, AWS, Redis, Jenkins, Grafana

Software Engineer　　　　Hook Co　　　　Oct 2021 – May 2022

- Worked on back-end team for a CRM data insights platform, developing platform features and also creating ETL pipelines to integrate customers' live data sources
- Designer and lead developer on an Outreach integration feature, allowing customers to automatically send emails based on live product data. This feature is not available on any other platform.
- Led development for a 'Notes' feature, integrating with external CRM APIs.
- Built a predictive binary classification model for customers to target accounts at risk of churning and suggest useful actions.

Technologies used: Python, SQL, react JS, Flask, AWS, DataDog

| Data Consultant | Peru Consulting | Sept 2019 – Sept 2021 |

Projects included:

- **Data Architect at NHS Digital:** Designed pilot metadata pipeline for Health Education England, offering potential cost savings of £500MM per annum.
- **Data Analyst for commercial bank:** Built a regression model in R using an internal database to verify client's supplier pricing, driving renegotiations that decreased main supplier price by 12%.

| Data Science Intern | artificial.io | June 2018 - Sept 2018 |

- Built a gradient-boosted tree model to predict insurance risk, applying binary classification methods to housing data. Model had a 12% higher R2-value than the previous model.

Education

| Mathematics MSci | Imperial College London | Sept 2015 – July 2019 |

- Integrated Bachelor's and Master's, specialising in Data Science and Statistics.
- Received First Class Honours (4.0 GPA Equivalent)
- **Master's dissertation:** Modelled the causal effect of 20mph zones in London on traffic accidents by sourcing then transforming TfL data in R, using machine learning and regression to generate the propensity scores used to eliminate selection bias.

Personal Projects

- Developed "Synthesia", a VR musical puzzle game in Unity for Meta Store.
- Developed "Splish", **#2 Paid Puzzle Game, #11 for Paid Games in the UK** on Apple App Store in May 2023:
    - Google Play link
    - App Store link
- GitHub projects: github.com/luxi-liu97/
- Published novels on Wattpad. My most popular book, "The Billion Dollar Girl", has 27 million reads

Technical Knowledge

Languages: Golang, Python, R, C#, Java, terraform, JavaScript, LaTeX
Technologies: AWS, Unity, Vue.js, MATLAB, SQL