

Xiaozhou(Maze) Lu

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EDUCATION

Johns Hopkins University , Baltimore, MD	Jan 2020 - Dec 2021
Master of Applied Mathematics and Statistics	GPA:3.8/4.0
Core Courses: Machine Learning, Deep Learning, Algorithms, Object-Oriented Software Engineering	
Arizona State University , Tempe, AZ	Aug 2015 - Dec 2018
Bachelor of Science, Mathematics Statistics (<i>Honor student of Dean's List in Spring & Fall 2018</i>)	GPA:3.6/4.0

SKILLS

Language	Python, Java, JavaScript, TypeScript, HTML, CSS, ReactJS, NodeJS, R, Tableau
Databases	MySQL, DynamoDB
Data Science Skills	Data Visualization, Web Development, Forecasting Modeling, Machine Learning Regression and Classification Modeling, A/B Test

PROFESSIONAL EXPERIENCE

Software Development Engineer, Amazon.com,Inc.	Seattle WA, May 2022 - Dec 2023
Full-stack Development: <i>Replan List Tool Meridian Migration and Feature Upgrade</i>	
<ul style="list-style-type: none">Successfully accomplished and launched the Replenishment List Tool to over 40 walk-in stores and warehouses, leading the migration from AngularJS to the React(Meridian).Created a scanning feature in the Replen List Tool by JavaScript, resulting in reduction in inventory picking errors, leading to substantial cost savings (~\$ 2 million).Identified a latency bottleneck and lead the resolution and resolved the problem without necessitating changes to the user interface or workflow, resulting in improved page loading times and a smoother user experience.Collaborated closely with various business teams to ensure the smooth execution of the product launch plan; Produced visual mockups to enhance project clarity and facilitate efficient implementation;Actively monitored and assessed the product's performance in pilot stores, addressing situational challenges, and eventually deploying it across all Amazon Fresh and Go stores.	
Back-end Development: <i>Enhanced PRIMS solution for 3P stores</i>	
<ul style="list-style-type: none">Developed and defined request route maps for PRIMS, ensuring efficient routing and handling of incoming requests, resulting in streamlined processes by JavaImplemented and configured new ProcessPaths and Workflows for 3rd party sellers selling groceries on Amazon Fresh in the Workflow Orchestrator.Collaborated closely with cross-functional teams to gather requirements and deliver high-quality solutions.	
AWS Cloud & Service maintenance	
<ul style="list-style-type: none">Configured and procured AWS resources for applications through CDK code packages, simplifying infrastructure maintenance and optimizing CloudWatch metric usage by Python, resulting in significant cost reductions for the teamTracked, resolved on-call tickets, reduced by 30% through proactive efforts.Implemented new metrics and alarms to enhance monitoring and alerting capabilities for product Identification Number match, further improved system reliability, reduce duplication.	
Software Development Engineer, LINKSciences LLC.	Baltimore MD, July 2021 - May 2022
<ul style="list-style-type: none">Created a comprehensive map positioning system (Gecode) covering the entire United States using Python.Built a hospital ranking web application in React using US News hospital data, deliver various functions on the web portal by PythonDeveloped a front-end interface featuring interactive data visualizations, including Radar graphs and Venn graphs, using Echarts.Operated within a Test Driven Development (TDD) environment to maintain code quality and reliability throughout the development process.	
Data Researcher, Hopkins Club for Innovation and Entrepreneurship	Baltimore MD, July 2020 - May 2021
<ul style="list-style-type: none">Developed interactive Disease Knowledge Graph dashboard based on Disease Knowledge network with JavaScript, HTML/CSS which helped patients self-diagnosis or made informed decisions with the insightsBuilt the Disease Knowledge network by R (NetworkD3)and D3.js which based on managed 4859 nodes of diseases data and 11684 medical specialty relationship links by SQL to illustrate the relationship of human diseasesCreated data pipeline by Python (BeautifulSoup) to collect COVID-19 data efficiency from multiple URL sources in automated way	