**Michelle Xia**

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**WORK EXPERIENCE**

**Vail Resorts** November 2023 – April 2024

*Ski Instructor [Hiatus from software engineering]* Vail, CO

**Amazon** August 2021 – August 2023

*Software Development Engineer* Denver, CO

* Designed a new **RESTful microservice** adding cloud functionality to an existing service to enable users to update app configurations to device test groups with less than **5 ms per call** using **AWS** **ECS**, **Route53**, **ELB**, and **Java**
* **Implemented and deployed** a microservice connecting to an existing service with **1 million** transactions per minute without affecting existing service traffic and maintaining existing SLAs
* Designed and deployed **CI/CD pipelines** using **TypeScript** and **CloudFormation** to minimize deployment risks
* Developed **Python** script to research metric patterns, **saving ~$100k yearly** by enabling re-allocation of resources
* Architected and built website using **Angular JS**, **AWS CloudFront**, **CloudWatch**, **CSRF tokens**, **CORS**, **SSL**, and **Midway Token Auth** to migrate the existing website to new AWS infrastructure using new auth
* Designed and developed back-end logic in **Java** for processing device engagement metrics on new device launch
* Developed rigorous **unit tests** with several edge cases on new device engagement metrics to ensure code integrity

**University of Texas at Austin** September 2020– May 2021

*Research Assistant* Austin, TX

* Demonstrated **image classification** recommender systems outperform state-of-the-art text recommender systems
* Recipient of the University of Texas at Austin Undergraduate Research Fellow award

**Cisco Systems** May 2020– August 2020

*Security Software Engineer Intern* Richardson, TX

* Harnessed **GitHub**, **Java**, and **Python** technologies within the Software Development Life Cycle process
* Developed solution automating **threat containment** within a corporate network environment to protect client assets
* Implemented an authentication scheme incorporating **machine learning** to perform authentication via facial recognition in order to ensure tight security of customers’ networks
* Repaired bugs within Cisco code and developed unit tests to streamline integrity checking processes of codebases

**Tyson Foods** May 2019 – August 2019

*Cybersecurity Intern* Springdale, AR

* Built an app converting **CVSS risk scores** to Tyson-specific risk scores, enabling quick, informed decision making
* Scripted risk score enhancement using Twitter **scraping** and **APIs** to improve **vulnerability management** accuracy
* Created and automated reporting and dashboards while ensuring data integrity, improving security posture visibility

**PROJECTS**

**Texas A&M Datathon (Major League Hacking Event)** *- For You Page* Fall 2020

Technologies used: nltk, spaCy, jupyter, python, numpy, matplotlib, pandas, gensim, pickle, Streamlit

* Won 1st place out of 1,300 people in the world’s first and only Data Science Major League Hacking hackathon
* Built a personalized website for next year’s Datathon participants with creative data gathering methods and NLP

**MIS 333K Bi-Annual Web Application Competition** *- Movie Theater Website* Fall 2020

Technologies used: C#, ASP.NET MVC, Bootstrap CSS

* Won 1st of 55 groups in ConocoPhillips competition to design and build movie theater website ([Github Link](https://github.com/michelle-xia/mainstreetmovies))

**Towards Data Science** *- How College Students are Handling COVID-19* Fall 2020

* Published [article](https://towardsdatascience.com/how-college-students-are-handling-covid-19-3705016205fe#e746-de8b47d8b8a7) using Natural Language Processing techniques to analyze college students’ response to COVID-19

**EDUCATION**

**The University of Texas at Austin** August 2017 – May 2021

*Bachelor of Business Administration, in Management Information Systems* Austin, TX

* Overall GPA: 3.73/4.00
* Certificate in Elements of Computing [6 courses in Department of Computer Science]

**SKILLS & ADDITIONAL INFORMATION**

**Technical Skills**: Python, Java, AWS, REST API, TypeScript, AngularJS, NLP, NumPy, Pandas, ASP.NET MVC, SQL

**GitHub**[: https://github.com/michelle-xia](https://github.com/michelle-xia)

**Work Eligibility**: Eligible to work in the US with no restrictions (US Citizen)