JAMES ZHAO

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Education

University of Toronto, Mississauga, ON, Canada *Sep 2016 - Apr 2020*
Honours Bachelor of Science, Computer Science

Employment

Senior Software Developer, GridBank *November 2022 – Present*
- Led the end-to-end development of the product and ensured a successful launch
- Designed and developed the frontend website with Next.js, improved website loading time, SEO and core vitals
- Developed the web and iOS API with Python and AWS Lambda, delivering a scalable and robust service
- Created video processing, moderation and AI recommendation pipelines to effectively manage large collection of videos
- Managed the AWS infrastructure as code with CloudFormation (SAM), greatly simplified deployment and maintenance

Software Development Engineer, X-Ray @ Amazon Web Services, Vancouver, BC *May 2022 – November 2022*
- Improved the process used to test our pre-production environment, increased the testing velocity
- Enhanced service performance visibility by incorporating new metrics across the data ingestion funnel
- Ensured service integrity by writing unit and integration tests for APIs with Java

Software Engineer I, Nylas, Toronto, ON *October 2021 – April 2022*
- Refactored the Nylas Availability API, reduced server crash rate for user input validation
- Reduced time to process Consecutive Availability by 50% and increased process limit by 100x
- Reduced GitHub Action cost by 90% and accelerated tests by eliminating unnecessary function calls and resolving deadlocks
- Increased code readability and maintainability by adding Python type annotations across the codebase
- Maintained the Nylas Scheduler API, implemented new features and crushed bugs

Software Developer – Growth Hacking, Mistplay Inc., Montréal, QC *October 2020 – October 2021*
- Collaborated closely with the Marketing Team to design and implement tools with Python that streamlined team's workflow for
  - Data Retrieval (AppsFlyer API)
  - Visualization (Google Sheets API, Grafana)
  - Processing (Python Pandas)
  - Reporting (SendGrid API)
- Simplified the complexity of pulling marketing data by 95% by building a dashboard using React, and Python
- Configured cloud testing environments using GitHub Action to run tests using Jest**,** MyPy**,** and PyTest frameworks

Projects

Story Pointing | **Python, React, AWS Amplify** *Summer 2023*
- Created a web app that allows collaborative story pointing for effective project planning
- Designed and developed the frontend with React and Chakra UI, hosted on AWS Amplify
- Developed the API with Python, AWS Lambda and DynamoDB. Managed with CloudFormation

Mac Windows Control | **Swift** *Summer 2021*
- Created a Mac app using Swift to locate, move and resize windows to the desired location

Skills

Languages: Python, TypeScript, Java, Bash, AppleScript   **Database**: AWS Dynamo, PostgreSQL, ArangoDB
Web: Bootstrap, Node.js, Next.js   **Others**: AWS, Proxmox, Grafana