

# William Mak

## Experience

2019 - present  **Senior Backend Engineer at Sentry**

2016 - 2019  **Intermediate Software Developer at GAdventures**

Developed and maintained the software and systems for the internal tour leader website. This includes applications for scheduling tour leaders, payments, and money requests.

**Technologies:** Python, Django, JavaScript, jQuery, CircleCI, Travis, AWS, ECS, PostgreSQL

- Improved currency API response times by 75x by simplifying the structure of data, bringing query times down to 2ms
- Lowered test suite runtime to 40s by introducing parallel testing and ensuring test isolation, a 12x improvement from before
- Integrated the systems with the Single Sign-On (SSO) provider Okta, allowing users to sign-in with a single click
- Built a system to interact with multiple RESTful APIs via webhooks to help translators translate API resources
- Worked with stakeholders to create a portal for tour suppliers to see upcoming activities and transports
- Enhanced the developer experience using Ansible to help developers set up their environments with a single command
- Set up Docker and configured CircleCI to replace the on-premises servers with AWS and enabled continuous integration

2017 - present  **Co-Creator of StageKeep**

Architected and developed an application with a small team to help users manage dancer formations matched to music.

**Technologies:** C#, Unity, Python, Django, JavaScript, React, AWS, EC2

- Created a cross-platform application using Unity that works on iOS, Android, Windows and MacOS
- Architected models and an API structure to store data from the app
- Implemented a Django backend to store user data
- Configured the system in AWS using EC2 and RDS
- Improved the application through user testing and getting feedback from users
- Used coverage.py and CircleCI to get automated testing and code coverage reporting

2015 - 2016  **Software Developer at Media Resources**

Designed and built the diagnostic UI for the company's digital billboards.

**Technologies:** JavaScript, Angular, Jenkins, Linode

- Created an application allowing users to layout any number of webcams on a page
- Gave users a responsive live visual representation of billboards using PaperJS
- Produced a method that enabled user customization of schedules through a step chart created through Highcharts
- Set up, configured and maintained a Jenkins instance to automate development and production releases
- Migrated the automation suite to GitLab as to provide overseas developers continuous access to servers

## Education

2011 - 2015

Honours Bsc, University of Toronto, Computer Science

---

[william@wmak.io](mailto:william@wmak.io) • Toronto, Ontario  
Github: [wmak](#)