

# Xin Hao Zhang

University of Waterloo Computer Science 2021

✉ [xinhao.zhang98@gmail.com](mailto:xinhao.zhang98@gmail.com)  
🐙 [github.com/xinhaoz](https://github.com/xinhaoz)  
🌐 [linkedin/xinhao-zhang](https://www.linkedin.com/in/xinhao-zhang)

## EXPERIENCE

---

### Facebook | Frontend Engineering Intern, Lightweight Ads Experiences

*React, Relay, GraphQL*

*September 2019 - December 2019 | Menlo Park, CA*

- Implemented media picker with unit and end to end tests to enable advertisers to select images and videos
- Created an image cropper with unit and end to end tests to crop selected ad media
- Added support for video ads by creating wrapper components around video uploading logic to allow old upload infrastructure to be used while codebase is transitioning

### MongoDB | Software Engineering Intern, Query Team

*C++, JavaScript*

*May 2019 - August 2019 | New York, NY*

- Improved features of the MongoDB query language by completing tickets such as adding support for index hints in update command and improving the oplog replay optimization
- Fixed bugs in query language and created JavaScript integration tests to verify code changes
- Implemented proof of concept to refactor mapReduce command to use more optimal aggregation framework

### Index Exchange | Software Engineering Intern

*Perl, Angular 6, Node, Go*

*September 2018 - December 2018 | Kitchener, ON*

- Implemented a standardized navigation wrapper in Angular 6 to be used in all future web services
- Prototyped service displaying pipelines, build statuses & test coverage from Gitlab using Angular 6 and Go
- Improved throughput of Perl daemons by identifying and refactoring inefficiencies in regex usage
- Eliminated hard-coded lists used in Node API by migrating data to a SQL database and caching query

### Peekapak | Software Engineering Intern

*React, SASS, Java*

*January 2018 - April 2018 | Toronto, ON*

- Built features of a platform providing social-emotional learning curriculum to educators
- Created Java servlets to retrieve account data from DynamoDB and assets from AWS
- Redesigned and built internal content editing platform from ground up to be more scalable and user friendly
- Implemented pricing plan pages and real-time user engagement dashboards to convert users to premium plans

## PROJECTS

---

### UW Blueprint | Social Venture Partners KW

*React, Node, MongoDB, Firebase*

*January 2020 - present*

- Student team partnering with SVP KW to build application review app to help allocate funding to NPOs
- Implemented navigation, application view components, candidate rankings page and user management pages
- Mentored teammates on frontend JavaScript and React concepts through code reviews and pair programming
- Platform used in COVID-19 relief funding rounds and used to help allocate 800k+ to applicants

### UW Blueprint | Plastics for Change

*React, Python, PostgreSQL*

*May 2018 - April 2019*

- Partnered with social enterprise PFC to create an MVP to track recycled Plastic through the supply chain
- Saw project through entire project development life cycle, including initial scoping work with client