KASHAV MADAN

kshvmdn@gmail.com | (289) 233-9850

https://kshvmdn.com   https://github.com/kshvmdn   https://linkedin.com/in/kshvmdn

EDUCATION

H.B.Sc., Computer Science, *University of Toronto*   Sep 2015 – Apr 2019

Specialist in Computer Science with a Minor in Mathematics

WORK EXPERIENCE

Software Engineering Intern (Platform Graphics), *Mozilla*   May 2018 – Aug 2018
- Contributed to compositor component responsible for handling asynchronous panning/zooming
- Improved **fixed-position compatibility** in **Firefox for Android** by updating where elements are painted and how their asynchronous transformations are computed
- Debugged and fixed multiple **failing reference and behaviour tests** related to **compositor/layout code**
- **Identified various bugs** in an automation suite responsible for running tests in chaos mode

Organizer & Lead Developer, *UofTHacks*   Since Sep 2016
- Manage developer team to build and ship portal system for hackers, sponsors, and administration
- **Lead and contribute** to development of core components, including hacker/sponsor registration, application management, check-ins, judging dashboards, and more
- Build and **maintain robust pipelines** for periodic backups, deploys, and data aggregations

Software Developer, *UofT Entrepreneurship Hatchery*   Sep 2016 – Apr 2017
- Contributed to development of Dashboard platform used by administration and start-up teams
- Led overhaul of large PHP codebase to leverage modern **RESTful patterns** with **microservice-inspired** model, including services for team-matching and database migrations
- Introduced reliable deployment process into workflow with **multiple staging environments** and **automated deploys**

Junior Web Developer, *Ontario Public Service*   May 2016 – Aug 2016
- Contributed to development of enterprise-wide Intranet platform serving over 40,000 daily users
- Added **cache layer** to web API with **Redis** to significantly reduce page-load and server response times
- Optimized **Elasticsearch** implementation to **increase search speeds by over 25%** by utilizing various **caching mechanisms** for heavy aggregations

SELECTED PROJECTS

fsql – https://github.com/kshvmdn/fsql   2017
- An SQL-inspired **parser and interpreter** for querying large filesystems, written in Go
- Reached top post on HackerNews and trended on GitHub with **3,400+ stars** and **90+ forks**

Cobalt / UofT Scrapers (collaborator) – https://github.com/cobalt-uoft   2016
- Collection of **open data APIs** to interface with public information from the University of Toronto
- Contribute to open source development and maintenance of **Node.js API** and **Python web scrapers**

nba.js – https://github.com/kshvmdn/nba.js   2016
- **Reverse-engineered NBA.com network requests** to expose a set of **Node.js APIs** to interface with player and game data
- Trended on GitHub with **250+ stars** and **20+ forks**

SKILLS

Languages   Go, JavaScript, Java, Python, C, C++, Bash, Rust

Technologies & Tools   Git/Mercurial, MongoDB, Redis, PostgreSQL/MySQL, Docker, Kubernetes, AWS (EC2, S3, RDS)