

Profile

Full-stack software engineer and generalist, looking to lead a challenging project with an experienced team.

Highlights

- Technical design and implementation of an enterprise-ready, single-page web application and backend
- Involved in gathering requirements from end users, and solving for their needs by working closely with product owners and designers
- Technical leadership, focused on improving engineering processes and software quality
- Devops, from setting up AWS infrastructure and monitoring to debugging production issues and putting out fires
- Hiring and mentoring, from interns to senior engineers

Technical Skills

- Strong: Ruby, Ruby on Rails, MySQL, JavaScript, AngularJS and Angular
- Experienced: TypeScript, React, Docker, terraform, Linux, HTML, CSS, bash, Rust
- Dabbled: Python, Java, C++, PHP

Experience

2011 – Now **Tech Lead** at MYTIME

- First engineer at MyTime
- Helped build the entire application from the ground up
- Modeled core domain for scheduling and online booking products
- Architected and lead development of MyTime's Point of Sale product
- Extracted payment processing into a separate service, abstracting multiple payment gateways
- Designed foundational architecture and client-side ORM for a scalable frontend web application in AngularJS
- Designed a more robust data import system, ensuring a smooth onboarding process for businesses
- Introduced mandatory code reviews, and helped ingrain a culture of writing unit/integration testing for all new business logic
- Performance optimizations, eg implemented a hot loop in a Ruby extension for a 30x speedup
- Supported engineering and customer service teams, unblocking team members in any way necessary

2010 – 2011 **Lead Developer and DBA** at VEBSITE

- Data processing on the order of a *billion* records with Ruby
- PHP programming, Linux server administration and PostgreSQL database management

Projects

- Brick** Bot that plays Rocket League, a multi-player physics-based car soccer game
Repository: <https://github.com/ehsanul/brick>
- Built using Rust
 - Reverse-engineered and simulated physics of the game for prediction
 - Implemented and extended hybrid A* algorithm for move planning
- Jelly** *Retired*: Suggested relevant links as you browse the web, via bookmarklet/add-on
Worked by *automatically extracting keywords* to search for related content
- Sole *technical co-founder*
 - Created an ensemble of multiple keyword extraction algorithms to detect better keywords
 - Tuned scoring algorithms for ranking search results from various sources

Open Source

- TruffleRuby** Implemented missing BigDecimal methods: [Commit](#)
- rlbot-rust** Added support for flatbuffers-based foreign functions: [Pull Request](#)
- Radicale** Added support for http-based authentication: [Pull Request](#)
- rust-ws** *Retired*: Early WebSockets implementation in Rust

Education

MAY 2010 **Bachelor of Science** in MECHANICAL ENGINEERING
New Jersey Institute of Technology, Newark, New Jersey

Societies and Awards

- INTERNATIONAL STUDENT PRESIDENTIAL SCHOLARSHIP at NJIT
- ALBERT DORMAN HONORS COLLEGE
- PHI ETA SIGMA National Honors Society
- TWO CERTIFICATES OF EXCELLENCE from CAMBRIDGE UNIVERSITY for the *highest marks obtained nationally* in both MATHEMATICS and ECONOMICS in Saudi Arabia in the A-LEVELS FINAL EXAM