

# Zaid Qureshi

## Education

**BASc in Software Engineering with Engineering Management**  
University of Ottawa

*Sep 2012 to Apr 2016*

- Academic Director - Software Engineering Student Association

### AI Certificate

University of Toronto

*Sep 2021 to Apr 2023*

- Machine Learning - Sep - Dec 2021
- Reinforcement Learning - Jan - Apr 2022
- Deep Learning - Jan - Apr 2023

### Machine Learning

Stanford University - Coursera

*Sep 2018 to Dec 2018*

### Foundations of Enterprise Architecture

University of Toronto

*Sep 2018 to Dec 2018*

## Summary

- Designed and Developed a UI rendering engine
- Designed and Developed payment chatbot for Paymentus
- Integrated IVR systems with voice recognition APIs
- Lead teams of 3-6 developers for multiple projects
- Developed ML models to compete in games and improve basketball shots
- Self starter, took initiatives to improve business processes
- Designed and Developed business domain model engine
- Entrepreneurial, failed TutorStaff, Parkin, Freshbe, working on [Learnly](#)
- Developed Android Application with 41000+ downloads
- Designed and developed distributed web applications
- Contributed to a migration from a giant monolith to SOA
- Managed multiple projects in Deadline-Driven Environments

## Areas of Expertise

- Languages: Java, JavaScript, Bash, PL/SQL, Ruby, C, C++, Python, Expect, EJS, Freemarker
- Web Frameworks: Spring MVC, Spring Boot, Struts, Ruby on Rails, ExpressJS, Sails, Node, Dropwizard, GraphQL
- Mobile Frameworks: React Native, Android, Ionic, PhoneGap/Cordova
- Notable Libraries & APIs: Mocha, Mockito, Chai.js, Jest, Sinon, Puppeteer Selenium, AWS, Google Cloud, Tesseract, Amazon Lamadas, Webpack, Gulp, Maven, Ant
- Notable Softwares: Git, Tomcat, Nginx, Dkron, Asterisk, Wordpress, draw.io, Archimate
- Monitoring, Logging & Analytics: Grafana, InfluxDB, Telegraf, Elastic Search, Kibana
- Databases: PostgreSQL, Oracle SQL, MySQL, DynammoDB, MongoDB (NoSQL), Redis
- Frontend: HTML, CSS, Sass, Less, AngularJS, ReactJS, React Native, jQuery, KnockoutJS, d3, Bootstrap
- Virtualisation: Docker, Kubernetes, AWS/EC2, Vagrant, VMWare
- Chatbot & NLP/NLU: Microsoft LUIS, dailogflow, Amazon Lex

## Professional Experience

**Software Development Engineer II**

*Apr 2020 to Present*

## Amazon, Seattle

- Working on optimizing the eDirect Import supply chain by shaping the shipment booking process and optimizing inbound inventory
- Developed a shipment booking portal to make the booking process efficient for Amazon vendors, while giving opportunities for Amazon to optimize the supply chain. Proposed a paper to increase container utilization to save \$100M/year, which is on the roadmap for implementation. Worked with data science teams, and focused on how AI models used in the import supply chain can be simplified.
- Led cross-team, multi-year projects, spanning 4 teams. Paved the way how Amazon systems will handle multiple shipments originating from single booking requests, dangerous goods inventory, and traceability.
- Led re-architecture projects from monolith to microservices, with a safe 2-way door migration strategy.
- Tackling technical debt initiatives to improve code base and reduce complexity, while reducing time to develop new features
- Took the initiative to create a UI metric library that allows capturing UI metrics with minimum setup without polluting business logic with metrics logic. This helped Amazon teams get started with UI metrics to the dashboard in days vs weeks.
- Present leadership & stakeholders with technical documents
- Participated in organization hackathons
- Active mentor & mentee
- Technologies used: Java, Javascript, React, Typescript, Spring, Lambda, ECS, S3, Dynamodb, api gateway, CDK, Cloud Formation, Amplify, Cloudwatch, SQS, SNS, Eventbridge..

## Founder

*Aug 2021 to Present*

### Learnly | [Learnly](#)

- Learnly is a platform that allows anyone to learn anything with a structure
- Started as a coding bootcamp focused on problem solving, and now is a learn anything platform
- Built completely serverless to minimize costs, utilizes popular LLMs to power application
- Features: Create courses starting from a topic, chat with courses, chat with documents, automatically created and graded quizzes, and more coming

## Senior Software Engineer

*May 2016 to Apr 2020*

### Paymentus, Toronto

#### Next Gen Team - Jan 2019 to Apr 2020

- Designed and developed a configuration portal for onboarding new clients
- Reduced new client implementations from a minimum of 1 month to several minutes
- Designed and developed a domain model engine that allows stakeholders to define business domain model through configuration tool and use the entity definitions for CRUD operations, data integration, defining new UI flows, generating email templates, PDFs, and SMS
- Designed and developed a UI rendering engine that rendered web UI flows, PDFs, Emails, SMS, etc., all of which are built via a UI builder in the configuration portal. This allows stakeholders to build new flows and enhance existing ones per client, without any development
- Used service oriented architecture to deliver applications
- Worked with remote teams globally
- Prioritized multiple initiatives and deadlines
- Managed multiple SIT and UAT environments in AWS
- Technologies used: Java, Spring Boot, Javascript, Node, Typescript, React, FreeMarker, HTML, CSS, Amazon S3, Oracle DB, Tomcat, Junit, Mocha, Mockito, Docker, Kubernetes, Nginx

#### Client Development Team - May 2016 to Dec 2018

- Developed a complete payment solutions (portals, IVR systems, etc) for a variety of clients
- Developed integrations between Financial Systems and CIS
- Developed and maintained different portals for end users and agents

- Contributed to a migration from a giant monolith to SOA
- Trusted with designing & fast delivery of PoCs
- Designed and Developed chatbot to accept payments, along with other inquiries
- Integrated IVR systems with voice recognition APIs
- Part of code reviewers team and regularly review design documents
- Contributed to change in culture and organization
- Gather and evaluate user requirements in collaboration with product managers, engineers, and customers
- Lead implementation projects, help create EPICs => User Stories => Sprints etc.
- Mentor junior developers
- Took initiatives outside hours on PoCs that changed business processes
- Technologies used: Java, Spring, Javascript, Node, React, FreeMarker, HTML, CSS, Amazon S3, Oracle DB, Tomcat, DailogFlow, Google Cloud APIs, Microsoft LUIS, Struts, Mocha, Mockito, Docker, AWS, Asterisk, Nginx, OCR

## **Cofounder & CEO**

*June 2018 to Present*

### **Freshbe**

- Re-innovated the way barbers and customers interact
- Conducted interviews for a user centered design while working with UX designers
- Validated the solution by interviewing end users
- Architected front end & RESTful API using tested design patterns
- Published findings/tutorials on Medium to share with the development community
- Created and Managed product backlog, used Kanban approach for project management
- Lead a team of 2 senior developer, 3 junior developers, and 1 UX designer
- Setup development best practices for the team i.e automated testing, code reviews, CI/CD, design docs, etc.
- Conducted frequent standups to keep team unblocked and on schedule
- Worked with the team to create requirements document, technical designs, and Product roadmap
- Technologies used: Javascript, JSX, ExpressJS, React Native, PostgreSQL, CircleCI, Docker, Amazon S3, Mocha, Jest

## **Lead Technical Consultant (Contract)**

*Sep 2018 to Nov 2018*

### **iQonsulting, Toronto**

- Engaged with a marketing organization in the health industry
- Participated in process re-engineering exercises
- Documented current state architecture
- Created & documented future state architecture with IT road map
- Suggested technologies to improve business processes by 50%
- Lead interviews with IT department and other stakeholders
- Weekly presentations with senior management

## **Cloud Developer**

*Sep 2015 to May 2016*

### **Clearwater Clinical, Ottawa**

- Developed innovative mobile medical solutions
- Built RESTful API that was consumed by a secure React web portal used by doctors
- Built Business Intelligence (BI) dashboards using React and d3
- Built automated PDF reports for audiometry test
- Automated testing using JUnit and Mocha
- Technologies used: Java, Dropwizard, ReactJS, Mocha, JUnit, Bootstrap, d3, FreeMarker, Node, Amazon S3, HTML, CSS, iText

## **Mobile Application Developer**

*Jan 2015 to Apr 2015*

### **Telepin Software, Ottawa**

- Developed android and cross-platform mobile application for mobile payments
- Designed 3 tier architecture server
- Automated scripts for testing Android, web applications, and USSD menus
- Wrote documentation on Confluence for technical and non-technical personnel
- Atlassian Jira used for issue tracking
- Technologies used: Java, Android, PhoneGap, Ionic, Oracle SQL, Expect, AngularJS, Bootstrap

## **Technical Consultant & Full Stack Developer (Contract)**

*Sep 2012 to Jan 2015*

### **Agile Governance Services, Toronto**

- Architected and developed a secure community portal with a user centered design
- Devised functional and non functional requirements
- Provided technical consultation on different technologies i.e RFID, Solar Panels etc.
- Suggested technology solutions to improve processes
- Interviewed 30+ end users for a user centered design
- Lead a team of 2 developers
- Technologies used: Ruby on Rails, PostgreSQL, Javascript, CSS, HTML, Bootstrap, Vagrant, Amazon S3

## **Developer**

### **Side Projects**

- Create user friendly, and efficient applications
- Developed 40 Rabbana Duas (41000+ downloads)
- Developed Escape (700+ downloads)
- Developed Line Maze, One Ayah a Day (150+ downloads)
- Contribute to open source libraries
- Mentor upcoming engineers
- Write online tutorials about new technologies
- Participate in questions on Stackoverflow
- Built a smart watch app that used machine learning to improve free throw shots in basketball
- Building [Learnly](#)