Ruchir Agarwal

San Jose, CA | ruchiragarwal05@gmail.com | linkedin.com/in/ruag05 | github.com/ruag05 | 313-888-2435

EDUCATION

San Jose State University - San Jose, CA, USA　　　　　　　**January 2021-December 2022 (Exp.)**
Master of Science in Computer Software Engineering　　　　　　　　　　　　　　　　　GPA 3.77
Enterprise Software Platform | Enterprise Distributed Systems | Data Mining

Dr. A.P.J. Abdul Kalam Technical University - India　　　　　　　　　**August 2012-May 2016**
Bachelor of Technology in Computer Science and Engineering

TECHNICAL SKILLS

Language: Java, JavaScript, C#, VB.NET
Database: MongoDB, MySQL, Redis
Front-end: React, Redux, HTML5, CSS3, Bootstrap
Back-end: REST API, NodeJS, ExpressJS, Apache Kafka

Tools: VSCode, IntelliJ, Postman, JIRA, GitHub, TFS, Confluence
Testing: Mocha, JMeter
Cloud/DevOps: AWS (EC2, ECR, S3, RDS), Docker, Kubernetes

WORK EXPERIENCE

GrapeCity India Pvt. Ltd - Noida, India　　　　　　　　　　　**April 2016-December 2020**
Software Engineer
Technologies: .NET, C#, WPF, WinForms, .NET Core, VB.NET, UWP
- Analyzed and executed client requirements using GrapeCity products adhering to .NET architecture
- Followed bi-weekly Agile-SCRUM sprints and participated in sprint planning, retrospect and sprint review
- Refactored the existing codebase, resulting in a 24% improvement in response time
- Collaborated with clients and the product manager to design and facilitate user engagement activities and execute User Acceptance Testing (UAT) shooting up stakeholder acceptance by 38%
- Modularized the code into reusable components and integrated in internal test framework
- Conducted unit testing of the modules before migrating to QA/UAT servers increasing software robustness by 11%

PROJECTS

Splitwise Prototype ⧉　　　　　　　　　　　　　　　　**February 2021-March 2021**
Technologies: MongoDB, MySQL, Express.js, Node.js, React.js, Redux, Kafka, AWS (ECR, S3)
- Developed a distributed web application which enables users to track bills and split shared expenses
- Built RESTful APIs using Node.js and Express.js, and integrated kafka for increasing system availability and scalability
- Enforced request authentication using Json Web Tokens (JWT), and incorporated Redux for state management
- Boosted application response time by 21% utilizing SQL connection pooling
- Performed load testing using JMeter for 1000 users, and deployed the dockerized web application to AWS ECR

Reddit Simulation　　　　　　　　　　　　　　　　　　　**April 2021-May 2021**
Technologies: MongoDB, Express.js, React.js, Redux, Node.js, Kafka, AWS (EC2, S3), Redis, SocketIO, Kubernetes**
- Co-ordinated with a team of five to simulate the website Reddit and implemented Redis caching which improved system performance by 35%
- Deployed sharded MongoDB cluster and incorporated role-based access for community management
- Implemented real-time messaging feature using Socket IO and used AWS S3 as an image server for high throughput
- Managed concurrent requests from 5000 users by utilizing load balancing through Kubernetes and hosted the application on AWS EC2

Zillow Prototype:　　　　　　　　　　　　　　　　　　　**June 2021-August 2021**
Technologies: React.js, Node.js, MongoDB, AWS (EC2)
- Designed, developed and managed a real estate market application using MERN Stack
- Applied the knowledge of software development lifecycle processes in the 5 phases of software development
- Collaborated with a team of three and spearheaded Agile-SCRUM ceremonies (sprint planning, retrospective, and more)