Shekhar Kumar Roy

Sr. .Net Developer

Energetic and result oriented software engineer with **3.8+** years of experience in developing robust code for real-time businesses. Developed microservice based **highly scalable Trading Exchange (spot and derivative)** from scratch which doubled *Efficacious Solutions'* operating income year over year. I am self-motivated and like to take on responsibilities independently but also excel as an enthusiastic team player when situation demands.

Education

- Bachelor of Computer Applications (BCA), from Indira Gandhi National Open University, 2016, India.

Skills

- C#, .Net Core, ASP.Net
- Entity Framework (Code First and Database First), TPL, PLINQ,
- MSSQL Server (Legacy and OLTP engine), PostgreSQL, MySQL
- Redis (Cache and Pub-Sub)
- NATS Streaming, Apache Kafka (Intermediate)
- WebSocket (Server and Client), SignalR
- Angular, AngularJS, jQuery, Typescript, JavaScript, Bootstrap
- Docker, Nginx, IIS Server
- TFS, Git

Experience

Software Developer

Efficacious Solutions Pvt Ltd / Rohini Delhi / 2017-May - Present

- Developed a high frequency robust **Trading Exchange** System from scratch.
- Being comprised of **20+ microservices** most of which are designed to be **scaled horizontally** the Exchange can handle **millions** of transactions per second.
- Implemented multilayer intelligent distributed caching and fault-tolerant inter-microservice communications to improve reliability and efficiency of the system.

Personal Info

Contact No.

+91 82855 38638

Email

mr.shekharroy@gmail.com

Address

642, J- Block, Jahangirpuri,

North-West Delhi,

Delhi - 110033

Date of Birth

20th Dec 1996

Nationality

Indian

Marital Status

Unmarried

Language Known

English, Hindi

LinkedIn

linkedin.com/in/shekharroy

Portfolio

shekharroy.com

Personal Projects

- ## Crypto Chain

  Tools and Technologies: .Net Core, C#, Redis, Docker.

  Description: This is a simple Blockchain application which allow a node to join the network and create, sign, verify and broadcast transactions. Newly broadcasted transactions are then received by peer nodes in their local transaction pool and later verified and included in next block upon successful mining and the minor gets some reward for the same. At a point of time the longest and valid blockchain is accepted by all the peer nodes. The mining **difficulty** is dynamically adjusted frequently to ensure timely block creation and mitigate **51% attack** on the blockchain network. Elliptic Curve `secp256k1` algorithm is used to securely sign and independently verify a transaction and `Sha256` hashing algorithm for mining purpose.

  Recognition: This project was recognized by GitHub and shortlisted for **GitHub Arctic Code Vault** Archival program.

  URL: github.com/kumarshekharroy/CryptoChain

- ## COME: C# Order Matching Engine

  Tools and Technologies: .Net Core, C#, Redis, Docker.

  Description: COME also known as for C# Order Matching Engine is a very fast, robust and cross platform order matching engine which is capable of processing **millions** of orders per second. It can accept and process a wide verity of orders such as **Limit**, **Stop Limit**, **Market**, **Stop Market**, **Post Only**, **Day Only**, **Good till Cancelled**, **Immediate or Cancel, Fill or Kill** in sub-microsecond time.

  URL: github.com/kumarshekharroy/COME

- ## Dating App

  Tools and Technologies: .Net Core, C#, SQLite, Angular, TypeScript, JavaScript.

  Description: This is a simple and lightweight social networking web app which allow its users to make friends, chat with them, upload photos, change or set display picture. JWT is used for authentication and authorization of request. It currently used SQLite as database but can easily be changed to any popular database of choice by changing few lines of code. Services of Cloudinary a leading cloud-based image management services provider is used to store and scale user uploaded photos.

  URL: github.com/kumarshekharroy/DatingApp

- ## **IGNOU Mate: Your IGNOU Guide**

  Tools and Technologies: Android, JAVA, SQLite, ASP.Net Web API, JSON.

  Description: "IGNOU MATE: Your Ignou Guide" is very handy and feature packed android application which allows user to get all the academic information, queries, news and updates about latest IGNOU University events in a blink of eye without any hassle. It serves information to each and every student in very unique and personalized manner.
  Being extremely easy to use the application is boon for the IGNOU students from diverse culture, background and pursuing different programmes as it doesn't require any special technical skills to use the application. Thus, it is extremely popular among students and saves a lot of time and efforts.
  Within **120 days** of launch on google play store it has gained Top spot & received love and support of approx. **25,000 students**. It reached to a total active userbase of **300K+ students** before I had to stall its development to focus on other ongoing projects in May 2018.

  URL: play.google.com/store/apps/details?id=royster.i_m.ignoumate

- ## **Quote Factory – Home of quotes**

  Tools and Technologies: Android, iOS, IONIC, SQLite, ASP.Net Web API, JSON.

  Description: Quote Factory is home to more than **1,50,000**+ fine grained quotes spanned across different categories with package size of only **10 MB**.
  User can search by author/category/content, **download** the quotes as image, mark it as favourite, **shuffle** it, **listen** to it or share it with friends on different social media platforms using different customizable **gesture** controls available in the app.

  URL: play.google.com/store/apps/details?id=com.shekharroy.quote.factory

- ## **MMM: Make My Meal**

  Tools and Technologies: ASP.Net Webform, MSSQL Server.

  Description: The Online Food Selling System Aka **Make My Meal (MMM)** is a web-based **food marketplace** developed for **collage project** allows user to order homemade food from local at reasonable cost.
  It allows food sellers to get them registered on the platform and then publish menu of the food they are offering with the images of it and price. The end-user or customer can browse through the whole catalogue of food items available nearby and can choose and order from them. It also allows its user to raise a complaint or give feedback regarding food quality of recent order can claim refund. If none raised the seller gets their money after deducting appropriate tax and marketplace service fee.