+1 (236) 868-7483
Vancouver, BC
shn.khorsandi@gmail.com

# Shayan Khorsandi
### Full Stack Developer

Portfolio: abradat.github.io/portfolio
github.com/abradat
linkedin.com/in/sh-khorsandi

Full stack developer with 3+ years of professional experience working on three enterprise banking projects based on microservices architecture. Enthusiastic about exploring new fields with more than three years of research experience and three publications.

## EXPERIENCE

**Application Developer**                                                                  **Feb 2022 — June 2022**
*Dyne Technologies Inc.*                                                                              *Vancouver, BC*
- Mobile application development using Flutter framework for iOS and Android platforms.
- Redesigned the whole routing and dependency management of the mobile app to reduce memory usage.
- Implemented new features, including integration with Instagram and tutorial for onboarding users.
- Redesigned and standardized REST API endpoints on the server-side for increasing performance and readability.

**Software Engineer**                                                                            **May 2018 — Aug 2021**
*Informatics Services Corporation (ISC)*                                                                  *Tehran, Iran*
- Developed core services of the Central Bank of Iran (CBI). Member of Central Securities Depository (CSD) and Iranian Instant Payment (IIP) projects, providing services to all 30 banks of the country.
- Developed backend services through Spring Boot and Spring frameworks based on microservices architecture.
- Implemented microservices patterns, including Saga Transaction pattern, API Gateway using Spring Cloud Gateway and Zuul, securing services based on OpenID Connect, messaging/streaming using Apache Kafka and IBM MQ, and distributed log tracing using Zipkin and ELK stack for the CSD project.
- Developed a Socket.IO client based on Spring Boot for communication between customer banks and CBI for the IIP project.
- Developed dashboard monitoring and management applications via Angular framework. Implemented a terminal for real-time communication between an Angular application and server's command line using WebSocket and Xterm.js for the IIP project.
- Containerized applications using Docker and used Jenkins for CI/CD.

**Research Assistant, Bio-Inspired System Design Lab**                                           **Jun 2016 — Feb 2020**
*Amirkabir University of Technology*                                                                        *Tehran, Iran*
- Implemented a method for predicting a ball's trajectory in humanoid robots based on the combination of k-NN Regression and Auto Regression in real and Gazebo simulator environments.
- Developed Motion Editor application for monitoring Herkulex servo motors and motion generation using PyQt and Arduino.
- Developed Walk Tuner and Offset Tuner applications for walking calibration based on PyQt and Arduino.

## SKILLS

| | |
|---|---|
| **Languages** | **Proficient in:** Java, Python, C/C++, Typescript, Dart |
| | **Familiar with:** C#, Go, Swift, Javascript, Solidity, Bash |
| **Frameworks** | Spring Boot, Spring, Angular, Vue.js, Flutter, Django, Flask, Beego |
| **DevOps** | Docker, Kubernetes, Jenkins |
| **Tools** | Git, SVN, Maven, Apache Kafka, IBM MQ, ELK Stack, Redis |
| **Database** | Oracle, MySQL, PostgreSQL, MongoDB |
| **Platforms** | AWS |

## RELEVANT PROJECTS

**Central Securities Depository (CSD) V2 — 📄 Documentation**                                      **May 2020 — Aug 2021**
Central Bank of Iran's new CSD system. Implemented based on microservices architecture with completely redesigned backend services and frontend Angular dashboard.

**Iranian Instant Payment (IIP) — 📄 Documentation**                                              **Aug 2019 — Aug 2021**
IIP is Central Bank of Iran's latest inter-bank payment system. Implemented based on the microservices architecture.

**Reddit Analysis— 🜨 Source Code | 📄 Documentation**                                                    **Winter 2021**
Application for crawling subreddit posts from Reddit website using Scrapy and analyzing them using SciPy and Stanford CoreNLP.

**News Crawler — 🜨 Source Code | 📄 Documentation**                                                         **Fall 2020**
Web application for crawling the latest news from CNN website through Selenium and latest tweets through Twitter API about PS5 console. Tweets' sentiments are extracted using Stanford CoreNLP for labeling and presentation in the Angular application.

**Kernel Module— 🜨 Source Code | 📄 Documentation**                                                        **Fall 2019**
Linux kernel module for hooking read and write system calls using ftrace and performing encrypt/decrypt actions with ROT13.
*For a comprehensive list of my projects please visit my website or my github.*

## EDUCATION

**Master of Digital Media**, *Simon Fraser University, Canada*                          (GPA: 4.0/4.33), Sep 2021 — Present
*Accredited and awarded by four leading Canadian post-secondary institutions: UBC, SFU, ECUAD, BCIT.*

**B.Sc. Computer Engineering**, *Iran University of Science and Technology, Iran*       (GPA: 3.72/4.0), Sep 2015 — Mar 2020