

# Rizwan Khan

(732)-688-8469 | rizhkh@gmail.com | [www.github.com/rizhkh](https://www.github.com/rizhkh) | [www.linkedin.com/in/rizhkh](https://www.linkedin.com/in/rizhkh) | [www.rizhk.net](http://www.rizhk.net)

## WORK EXPERIENCE

---

### IPKeys Cyber & Power Partners – Software Engineer

June 2021 – December 2022

- Developed an analytics platform, core functionality to support and handle data metrics, visualization tools, internal tooling and set up custom REST API's to access and stream real-time data
- Set up a robust backend structure to support API's using Django (Django REST framework) and interactive frontend using React to manage, stream, visualize and log real-time data metrics for the analytics platform
- Development was ensured on Testing and Staging environments before being deployed to a Production environment
- Developed newer builds and deployed various services and processes on Linux using Docker.
- Developed and deployed various solutions, e.g. setting up docker-compose files for services, system logs, database connectivity to collect data using connected end points
- Developed bash scripts to automate deployment and installation processes for various services on Linux operating systems
- Set up and monitored stable version builds and weekly test Jobs deployed on CI/CD's pipeline process using Jenkins
- Supported other development teams and projects by maintaining functionality and bug fixes
- Tools used on a day-to-day basis for development and maintenance included but not limited to Python, Django, JavaScript, React, Bash, Shell, various databases(Postgres and InfluxDb) and containerization tools

### Sunbird Software – Software Engineer

September 2019 – August 2020

- Developed functionality for data platform while maintaining and ensuring stability of different active platform builds
- Developed newer automated programs and fixes using Java, Python(Django), and various open-source APIs for Jenkins integration to ease continuous testing processes, deployed, containerized and created CI/CD using Jenkins to automate case production for various versions of product builds and data platform
- Developed and optimized functional in-house testing tools and solutions, new robust programming tasks, and scripts to execute automation functionality for newer build versions for the flagship product

### TRC Companies Inc. – Software Engineering Intern

May 2018 – August 2018

- Developed and updated process flows, test and product databases implemented for MS CRM Dynamics by using SQL queries to input required data in the system records using JavaScript, and SQL
- Built a scalable solution for monitoring and processing data in system that helped company save time by 40 percent by tracking files and logging time

## RELEVANT SKILLS & EXPERIENCE

---

**Languages:** Python, Java, JavaScript, C

**Technologies:** Django, Docker, Git, InfluxDB, Jenkins, Linux, Node.js, Pytorch, Pandas, Postgres, React

### Relevant Academic & Personal Projects:

- Programmed and deployed projects using Springboot, Node.js, Nexus, Npm, MySQL, NoSql, JavaFX, Shell, Apache Tomcat, Spark, PySpark, MaterialUI, Selenium, REST API's, Pytorch and Scala (academic). More Programming Projects are present on Github
- Experience writing Machine Learning modules, algorithms, neural networks and applying algorithms to datasets

## EDUCATION

---

### Rutgers University

Bachelor of Science – Computer Science

New Brunswick, NJ

September 2014 – January 2019

### Concentration: Software Engineering

Master of Science – Computer Science

## PROJECTS

---

### Navigation - [www.github.com/rizhkh/mazesearch](https://www.github.com/rizhkh/mazesearch)

- Self-navigating artificially powered agent that can navigate a maze using autonomous factors, observing its surroundings in the maze, learning from its movements and utilizing minimal human input to solve the maze.

### Minesweeper – AI agent - [www.github.com/rizhkh/mswp](https://www.github.com/rizhkh/mswp)

- Developed an autonomous AI agent capable of solving a game of Minesweeper using inference rules and constraints without using any human input for help. Designed a functional Minesweeper game for the AI agent to operate on.

**Work Authorization:** U.S Citizen (No sponsorship required)