Harekam Singh, M.Eng (Eng. Mgmt.) and B.Tech (IT)

Email : harekamsingh@gmail.com | **Phone :** +1 (236) 996-9373
Website : harekamsingh.com | **LinkedIn :** @harekamsingh

Dynamic contributor with demonstrated experience of over 7 years in the software industry. Skilled in software development, web applications, algorithms, solution architecture with established global exposure. I hold Canadian citizenship and am authorized to work for any employer in Canada with proven ability for remote work.

SKILLS

Data Structures | Algorithms | Microservices | Database Design | Distributed Systems | Scalability | Java | Python | Javascript | MySQL | Node.js | React.js | Redux | HTML | CSS | MongoDB | Neo4j | Redis | SaaS | AWS

PROFESSIONAL EXPERIENCE

Pinterest
Duration – July 2021 – Present
Title – Senior Engineer

Job Responsibilities:

- Part of Core-services that handles 8-10 million QPS, and also handles backend for pinterest core-features like pins, boards, async computing & services to interact with databases.
- Migrated Kafka code in multiple services to an internal library which helps in switching underlying technology without updating code in future.
- Migrated services to jdk11 from jdk8 & made them compatible with aarch64 cpu types for infra saving worth $500K annually.
- Optimized host instance type of a service from c5.9x to c5.4x (aws instances) which helped in unlocking auto-scaling as well, saving infra cost by $1.2 million annually.
- Worked on various features for internal queue based async computing:
    - Benchmark mysql vs tidb as a database by load testing.
    - Develop java server apis for enqueue, acknowledge, delete, retry, counts for various states of jobs in queue.
    - Build REST apis in python for queue based async computing dashboards.
    - Build dashboard in javascript, react.js for clients to track various stages for job getting executed in queue based async computing.
    - Designed & developed python worker for job execution which was an improvement on previous version. The design improved various stats in the backend server like reducing open sockets by 90%, cpu usage reduction by 70% & reduced qps by 50%.
    - Also, handling migration to new python workers for >1000 queues .

Amazon (AWS)
Duration – October 2019 – July 2021
Title – Software Development Engineer

Job Responsibilities:

- Part of AWS commerce platform, which handles invoicing and billing for AWS customers.
- Successfully launched invoicing report which provides summary to customers.
- Designed & developed service for foreign exchange & government compliance on invoicing which required handling of various use cases based on different countries.
- Improved operations load by making services Full CD (continuous deployment) & sandboxing production environment for running tests.
- Designed & developed service to automate backfilling of historical billing data for the new projects.

University of Ottawa - IBM Canada
Duration: April 2019 – August 2019
Title: Capstone Project

Job Responsibilities:

- Conduct requirements gathering session with stakeholders to understand underlying problem.
- Identify Business Objectives along with stakeholders and determining the scope of the work.
- Perform market research and do a competitive analysis to create a compelling value proposition for the client.
- Perform cost-benefit analysis of all possible solutions and outline the pros and cons of each. Outline the different risks associated with implementation of shortlisted solutions.
- Coordinate with stakeholders (IBM, Department of National Defence, and the project team), facilitate and participate in kick-off meetings.
- Prepare presentations for the suggested proposal and provide a demo to business.

CybernetIQ
Duration: April 2019 – August 2019
Title: Full Stack Developer (Part-time)

Job Responsibilities:

- Part-time developer during my Masters.
- Addition of new features to support different network router to analyse security loopholes.
- Optimization of firewall security bug notifier and logger.
- UI and backend bug fixing to improve user experience.

Mahindra Comviva
Duration: September 2016 – August 2018
Title: Senior Engineer

Job Responsibilities:

- Designed and developed engagement solution for a product called Palmleaf.
- Designed a framework for Bot Creation as a part of engagement solution for Palmleaf.
- Responsible for architecture and building of micro-services as well as SaaS cloud solution (multi/single tenant).

- Responsible for handling and leading of team. Performing quality review.
- Developed web-app of Palmleaf using React and Redux.
- Developed Digital Banking Experience Platform (DBXP) using the same Bot framework.

Click Labs
Duration: April 2015 – September 2016
Title: Software Developer

Job Responsibilities:

- Designed databases and developed backend of 6 projects.
- Standardized optimal coding structures.
- Optimized nearby fleet search algorithms used in most of the projects developed under the company.
- Improved architecture of custom calendar/slots which is used to manage fleet schedule.
- Responsible for leading the back-end team, training new recruits, and performing quality review of the team.

AWARDS

- **2017** | 1st prize in hackathon conducted by **Mahindra Comviva**.
- **2015** | Star of the Quarter Award at **Click Labs**

ACADEMICS

- **2019** | M.Eng (Engineering management), **University of Ottawa**
- **2014** | B.Tech (Information Technology), **Guru Gobind Singh Indraprastha University**