

# Haramrit Singh Khurana

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LinkedIn: [linkedin.com/in/haramrit09k/](https://www.linkedin.com/in/haramrit09k/) | GitHub: [github.com/haramrit09k](https://github.com/haramrit09k) | Portfolio: [haramrit09k.github.io](https://haramrit09k.github.io)

## EDUCATION

- Master of Science, Computer Science | GEORGE MASON UNIVERSITY | GPA 3.76** **2019 – 2021**  
*Coursework: Algorithms, Systems Programming, Object Oriented Design, Database Systems, Component-based Software Engineering*
- Bachelor of Engineering, Computer Engineering | UNIVERSITY OF MUMBAI | GPA 4.0** **2015 – 2019**  
*1st Runner Up- Best Senior Thesis; 2nd Runner Up – Mumbai Hackathon (2017)*

## WORK EXPERIENCE

- Software Engineer Intern | Nexus 8 International, Washington DC | Internship** **May 2020 – Aug 2020**
  - Individually developed two major web components using ASP.NET Core framework and Blazor in compliance with HIPAA
  - Optimized the image upload process and decreased the upload time by 30% on average
  - Developed test cases and performed unit testing of the application before release to the stakeholders
  - Identified and analyzed new business and functional requirements as a part of requirement gathering sessions with customers
- Backend Developer Intern | Don Bosco Institute of Technology, Mumbai | Internship** **Jun 2018 – Dec 2018**
  - Developed the plan and headed the team that implemented remodeling of the website Don Bosco Journal of Science and Engineering using Node.js, Express and MongoDB
  - Designed and implemented a secure tag-based paper-reviewer matching algorithm to automate the review assignment process



## OTHER POSITIONS

- Teaching Assistant – IT207: Applied IT Programming | George Mason University, Fairfax, VA** **Aug 2019 – Present**
  - Designed and graded assignments and exams, held office hours, and helped students understand the core concepts of web programming in PHP
- Technical Head - ACM-DBIT | Don Bosco Institute of Technology (DBIT), Mumbai, India** **Jul 2017 – May 2018**
  - Organized Teknack, a two-day intercollegiate online gaming festival featuring more than 10 games (Single-Player, Multi-Player & Open World). Games were played over 25000 people, a significant markup of 28 % from Teknack '17

## SKILLSETS

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| <b>Programming Languages:</b> Python, Java, C, C#  | <b>Other:</b> GitHub, SDLC, Docker, Kubernetes, Jenkins, Android, JUnit, Tableau, Linux, REST, Amazon Web Services |
| <b>Database Systems:</b> MySQL, MongoDB, Oracle  | <b>Areas:</b> Distributed Systems, Algorithms, Operating Systems, Data Mining, Machine Learning, Statistics        |
| <b>Frameworks:</b> React Native, Angular6, Django, Swing, Hibernate JPA, Bootstrap, Node.js, Spring Boot |  |

## PROJECTS

- Portfolio Website**
  - Designed and developed a [portfolio website](#) using **ReactJS**, hosted on GitHub Pages with an auto-deploy setup with a push event trigger
  - Incorporated **XSS input sanitization** using DOMPurify to prevent against cross-site scripting attacks
- wha2do**   
  - A minimal design to-do list Android app built using **React Native** and **Firebase**.
  - Implemented **swipe gestures** to make it easier for the user to mark task status[Play Store Link](#)
- SpaceTerra**
  - A single player JavaScript game that went live for ACM-DBIT's online gaming fest, Teknack 2017
  - Utilized **Phaser.io** game engine, **Node.js** and **MongoDB** to host the web application on a PM2 load-balanced Nginx server
  - Played by **over 12,000 players** through the festival making it the most successful game of the event
- NumPy for C**
  - An **open-source** C library for Vectors, Arrays and Number Systems totaling **96 functions** that were 2x faster than Python equivalents
  - Won 2<sup>nd</sup> Runner Up at Mumbai Hackathon (2017)
- Student Survey Form**
  - Employed Docker and Kubernetes for containerization, **Jenkins** for **continuous integration and deployment** and GitHub for version control
  - Wrote and **deployed RESTful API** for CRUD operations with **Lambda** and **DynamoDB**.
- A Resource Effective Approach for Distributing Machine Learning Models over a Cluster**   
  - An **interactive desktop application** to facilitate the **automation** of the **training process distribution** over a local network
  - Maintained accuracy and achieved an overall **10% reduction** in model training time
  - Technology stack: **Electron.js** and **Batch scripting** for developing the application, **TensorFlow** for devising the test models[YT Demo Link](#)

## CERTIFICATIONS

- AWS Certified Solutions Architect – Associate (Amazon Web Services)** **Jun 2020 – Jun 2023**