

NAKSHATRA SHARMA

Cell No.: +1 (352) 877-1376 • E-Mail ID: sharmanakshatra@gmail.com • Website: www.nakshatra2312.com

LinkedIn: www.linkedin.com/in/nakshatrasharma/ • GitHub: www.github.com/nakshatra2312

SKILLS SUMMARY:

- Languages and Technologies: Java, C#, JavaScript, Python, Docker, Git, PostgreSQL, Elixir, CSS, HTML, MSSQL
- Libraries and Frameworks: .NET, Spring MVC, Angular, Phoenix, WPF, WCF, PRISM, Unity, LibGDX

EDUCATION:

Master of Science: Computer Science, GPA - 3.8

Graduation – 05/01/2018

University of Florida - Gainesville, Florida, USA

Relevant Courses: Analysis of Algorithms, Advanced Data Structures, Networks Security, Distributed Systems, Principles of Programming Languages

Bachelor of Engineering: Computer Science, GPA - 3.6

Graduation -05/01/2014

Panjab University - Chandigarh, India

Relevant Courses: Data Structures & Algorithms, Software Engineering, Object-Oriented Design

EXPERIENCE:

Software Development Intern

05/01/2017 – 08/17/2017

MicroSystems Engineering – Lake Oswego, Oregon, USA

- Formulated Full Stack of a Web Application in an **Agile Environment** to automate the data processing and verification process, helping engineers and doctors for efficient utilization of limited resources.
- Improved all the server endpoints using **WCF-RESTful**, resulting in 20% faster response between client and server.
- Improved the database query runtime by 30% using indexing and slashed the latency by 25% implementing cache
- Improved the testability and extensibility with **MVC** design pattern and **Unity IOC** for dependency injection
- Achieved concurrency in all web application tasks using **Locking Mechanism** for better performance.
- Developed and deployed an intermediate staging server on **AWS** for testing the application, before deploying the application to the production server, resulting in a **Continuous Integration Continuous Development (CICD)**.
- Developed **Docker** images for infrastructure virtualization and application isolation.
- Implemented **Pub-Sub Event aggregators** for smooth communication between different application layers
- **Technologies:** C#, .NET MVC, JavaScript, MSSql, WCF Web API, Unity, Entity Framework, EC2, Docker, Git

Software Developer

06/25/2014 – 05/10/2016

Infosys Limited – Hyderabad, Telangana, India

- Developed a Web application on **SharePoint 2010** to advertise the products via events, campaigns and subscriptions
- Improved the User interface by implementing 'Localization Algorithm' that boosted the application popularity by 23%.
- Implemented features like **reminder emails**, **OTP login** and verification system improving the user experience by 30%.
- Optimized the application solutions by 40% by writing test plans, deployment scripts and code reviews,
- **Technologies:** C#, AngularJS, SharePoint 2010, MSSQL, Email services, PowerShell scripting, Team Foundation Server

Software Developer Intern

01/25/2014 – 04/10/2014

Infosys Limited – Mysuru, Karnataka, India

- **SRPING MVC** based Web Application for a University with hierarchical Login features and departmental sub-divisions.
- Improved the user experience by 30% with features like 'Predictive Analysis' on large data sets and Floating login header
- **Technologies:** SPRING MVC, Java, MySQL, Java Server Pages, JavaScript, CSS

PROJECTS:

- Developed a **twitter** like web application on **Phoenix** framework with features such as user subscription, live tweet feeds, retweets and hashtags queries. Designed a robust engine to send tweets to multiple users concurrently using Elixir's multi-processing feature and improved the engine speed using in memory database. The application was stress tested with 100000 users. (**Phoenix, Elixir, JavaScript, jQuery, Web sockets, Html**) – December 2017
- Developed a **Compiler** for a small programming language with custom grammar, generating JAVA bytecode, which enabled the programming language to run on any platform with a JRE. (**JAVA, ASM bytecode framework for code generation**) – December 2017
- Developed a scalable and distributed (multi-processed) **Bitcoins Miner** using Elixir's actor model architecture with maximum CPU utilization. The system reached the efficiency of up to 780% when run on an 8-core machine. (**Elixir, Visual Code**) – September 2017
- Developed a web application for **Room-mate search** and rate. Conducted **interviews** with stakeholders to elicit functional and nonfunctional requirements and include the features accordingly. (**Angular, Bootstrap, JAVA, RDBMS, VOLOERE**) – November 2016
- Developed **web crawlers** for scraping the lifetime data of **500,000 toll-free numbers** of different series to prove that toll free numbers can be used as reliable identifiers for Telephone-PKI. (**Java EE, Selenium Libraries, Chrome Driver, JavaScript**) – May 2017
- Developed **Huffman Encoder and Decoder** for Data Compression and achieved a compression of 65%, Priority Queue Structure was used for generating Huffman Tree. (**JAVA, Git**) – February 2017
- Developed a fun touch-based gesture **android game** using **\$P recognizer** and **Libgdx** library based on user's feedback to include the most intuitive gestures. It was rated 4/5 by over 400 users surveyed. (**Android, Libgdx, Android Studio**) – April 2017