# **SAIMA KHATOON**

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#### **SUMMARY**

- Master of Applied Computing (AI Stream) candidate at the University of Windsor with 5+ years of professional experience in software development and system-level programming
- Proficient in C/C++, with deep knowledge of object-oriented programming, multithreading, socket programming, and debugging in Linux environments
- Experienced in using Git for version control and working in Agile/Scrum environments, contributing to team-driven development and code quality improvement
- Quick learner with excellent communication skills and a collaborative mindset, eager to apply datadriven solutions in real-world settings

#### **TECHNICAL SKILLS**

- Programming Languages: C/C++, Python
- Programming Concepts: Multithreading, IPC, System Programming, Socket Programming, Object-Oriented Programming (OOP), Design Patterns, Algorithms & Data Structures
- Tools & Technologies: Git, SonarQube, SonarLint, Doxygen, SVN, Jira, Agent-Based Modelling, Machine Learning, AnyLogic, OpenCV, Wireshark
- Web & Scripting: HTML, CSS, JavaScript, Shell Scripting
- Database Management: MySQL, PostgreSQL, Relational Databases
- Platforms: Linux (5+ yrs), Windows, Unisys MCP & OS2200 (proprietary systems)
- Development Methodologies: Agile, Scrum

#### **EDUCATION**

#### **Master of Applied Computing Artificial Intelligence Stream**

Sep 2024 - Present

University of Windsor, Windsor, Canada

Final semester requires a 4- or 8-month internship starting in September 2025

#### Post Graduate Diploma in Advanced Computing

Aug 2017 - Feb 2018

Centre for Development of Advanced Computing, Bengaluru, India

#### **Bachelor of Technology Computer Science**

Aug 2012 - Aug 2016

Vinoba Bhave University, Hazaribagh, India

#### **WORK EXPERIENCE**

### WCS Developer II

Feb 2024 - Aug 2024

Mouser Electronics, Bengaluru, India

 Updated and migrated CRT (Warehouse Control System Utility) from AIX to Linux, enhancing system compatibility

- Segregated C files based on functions and warehouse operations supported (e.g., receiving, stocking, pulling, sorting, consolidation, and shipping)
- Ensured clarity and easy traceability of files for team members by assigning meaningful labels reflecting both the operation and file functionality

## **Designation: Engineer**

Jul 2020 - Dec 2022

Unisys, Bengaluru, India

- Developed Connectivity Services (CS) on Linux for AIS-6.0 (Application Integration Services), created sample C++ socket applications, integrated the NTLM protocol, and packaged RPMs for deployment
- Supervised sprint efforts and facilitated Agile ceremonies as Scrum Master, driving team collaboration, ensuring timely delivery, and coordinating tasks to meet project goals
- Authored technical documentation, including CS Linux Help files (Doxygen) and developer guides, and updated the technical debt wiki for identifying areas for future enhancements
- Facilitated knowledge-sharing sessions on SVN branching, NTLM authentication, and error handling, boosting team productivity and reducing onboarding time for new developers by 20%
- Led support and bug fixing efforts, conducting developer testing and resolved critical and blockerlevel issues in SonarQube analysis for CPI and AISCallOut projects, restructuring code quality and reducing defects by 30%

Project Engineer Mar 2018 - Mar 2020

Centre for Development of Advanced Computing (CDAC), Bengaluru, India

- Created backend components of a web interface for the CAPC (CDAC auto-parallelizing compiler), used to convert C programs into OpenCL/OpenMP/MPI
- Integrated compiler tools (C2CL and C2OMP) with the frontend to automate code translation workflows
- Constructed array invocation, file generation, kernel generation, OpenCL boilerplate API creation, variable mapping, and dynamic memory allocation in Linux
- Built and fine-tuned shell scripts for efficient compilation and execution workflows
- Enhanced auto-par tool of the ROSE compiler by adding new OpenMP clauses, improving code readability and maintainability in the translated output
- Installed CAPC software on PARAM Shivay (Supercomputer), NSM-SSL, and Hybrid02 machines, and upgraded C2CL by porting it from ROSE version 0.9.5a to 0.9.10.54, ensuring compatibility with the latest platform

## **Software Programmer**

Sep 2016 - Mar 2017

Napasoft, Jamshedpur, India

- Accessed image data from cameras and stored it in a matrix (OpenCV) for the Hole Detection System
- Performed pixel recognition and real-time image manipulation to solve the image flip problem of cameras
- Designed and implemented MFC-based solutions for streamlined storage of coil data and related information, elevating data management and retrieval

### **AWARDS AND ACCOMPLISHMENTS**

- Certified Azure Fundamentals Specialist by Microsoft
- Received the "Good Job" Award for outstanding contributions to AIS project at Unisys