# Krish Khatri









#### **EDUCATION**

UNIVERSITY OF ALABAMA

Tuscaloosa, AL

Bachelor of Science (B.S.) Computer Science Candidate

- Relevant Coursework: Discrete Mathematics, Advanced Data Structures and Algorithms, Operating
  Systems, Software Design & Engineering, Database Management Systems, Computer Algorithms, Computer
  Security, Software Evolution
- Awards & Honors: President's List, Dean's List, Received Presidential Scholarship, Received Department of Engineering Scholarship
- Extracurricular Activities: American Red Cross club, AI Club, Crimson Hacks, UA Association for Computing Machinery, Crimson Defense Cyber Security Club

#### PROFESSIONAL SUMMARY

- Experience in all phases of **Software Development Life Cycle** such as Analysis, Design, Development, Implementation, Integration, Trouble shooting, Testing, Deployment
- Experience in Object Oriented Analysis and Design (OOA/OOD), Object Oriented Programming (OOPs)
  Concepts.
- Expertise in **UI design** and development using Java Script, CSS, XML, HTML, XHTML, PHP
- Strong Technical and Analytical background, excellent analytical, problem solving, decision making ability, good communication and organization skills, team player, goal oriented with a commitment towards excellence.
- Self-motivated and avid learner in emerging technologies.

#### **TECHNICAL SKILLS**

Frameworks	Tensor Flow, Django, Angular
Languages	C, C++, C#, Java, SQL
Markup Languages	HTML5, XML, XHTML
Tools	Visual Studio Code, Visual Studios, Unity, Eclipse, PyCharm, IntelliJ IDEA, CLion, Docker, GIT
Databases	Oracle RDBMS, MongoDB, MySQL, Microsoft SQL Server
Web Servers	Apache2, Tomcat
Client-side Scripts	JavaScript, jQuery, TypeScript
os	Windows 10
Scripting Languages	Python, PHP

#### PROFESSIONAL EXPERIENCE

BAMA-1 CUBESat Flight Software Developer

**UASpace** ( NASA's 2020 CubeSat Launch Initiative) – The University of Alabama, Tuscaloosa, AL

- Designing, implementing, and testing space flight software for CUBESat satellite.
- Designing, implementing, and testing diagnostic and ground equipment software
- Developing the core flight software modules in C
- Discovery and adaptation of optimal algorithms for deploying drag sail.
- Attending and presenting at project meetings and reviews
- Defining and documenting development environment activities.
- Reviewing modules created by other team member and providing guidance.

#### Volunteer

#### **The American Red Cross** – Greenville, SC

- Coordinated food, clothing and household items for disadvantaged individuals and families.
- Engaged in community outreach to aid program mission centered on community support and enrichment.
- Supported engaging, fun and smooth-running events by helping with organization and planning.

#### ACADEMIC AND PERSONAL PROJECTS

## Chocoholics Anonymous (Academic): Java, XML

- Designed multi-class application capable of data processing and accounting services
- Implemented in Java using OOP to ensure proper program structure
- Improved user experience by implementing data storage services using XML
- Measured Performance using JUnit tests.

## Text-Prefix Searcher (Academic): Java, C

- Developed a console application capable of finding the longest word in multiple texts given a prefix input
- Utilized queues and System V msg queues to prevent redundancy via Persistence and increase efficiency
- Utilized Semaphores to ensure guard a shared resource
- Evaluated performance with scale and throughput

#### Employee Management Web Application (Personal): CSS, HTML, C, Apache2, PHP, MYSQL, SQL

- Developed a simple Employee Management web application used to store employee profile information
- Used Apache2 to host all websites Log in page, edit page etc.
- Tested application for vulnerabilities such as SQL injection attacks
- Patched vulnerabilities by editing back-end php code Added Prepared Statements.

## Course Management System (Personal): Java, CSS, HTML, XHTML, MySQL, Servlets, JSP

- Designed and developed a three-module online course management system to facilitate smooth and easy interaction between students and instructors using, HTML, XHTML for front-end; JSP and Java Servlet for backend
- Improved user experience by implementing a responsive and user-focused UI.
- Deployed on HTTP enabled Tomcat server
- Utilized MYSQL database server to enable data storage services

#### Airplane Cost-Time Algorithm (Academic): C++

- Developed a new algorithm to find the shortest duration path that does not go over a given maximum cost.
- Tested application with variable inputs ie. Large and Small graphs
- Ensured O(VE) performance by modifying bellman-ford algorithm to create said algorithm

### Kombat Karl (Personal): C#, Unity

- Created a first-person shooter game as part of a 10-man team.
- Assisted in development of new ideas and game design.
- Performed significant implementations of game engine components and gameplay routines
- Analyzed code and presented technical options
- Wrote unit tests for components