Suraj Rimal

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# Professional Summary

* Programming experience in C, C++, Python, Java, and problem-solving skills using OOP principles, data structures and algorithms and familiar with agile methodology.
* Have a strong background in data mining, data analysis, recommendation systems, and ML techniques.

**Skills**

**Languages**: C, C++, Python, Java, R, PHP, HTML5, CSS3, JavaScript

**Frameworks**: Django, Flask, Spring, Hibernate, REST API, BootStrap

**Developer** **Tools**: VS Code, Eclipse, IntelliJ IDEA, Postman

**Version Control**: Git

**Databases**: MySQL, MongoDB

**Paradigm**: Design Patterns, Object-Oriented, Data Structures, Algorithms

**Operating** **Systems**: Windows, Linux

**Scripting**: Bash, Python

# Education

**Southern Illinois University,** Carbondale**,** IL August 2020 Master of Science in Computer Science Current GPA: 4.0

***Relevant Courses***: Data Structure, Analysis of Algorithm, Data Mining/Big Data analysis, Artificial Intelligence, Distributed Computing, Linux/Unix programming, Computational Statistics, Advance Python Programming, Web application development.

**Tribhuvan University,** Kathmandu, Nepal October 2017

Bachelor’s in Computer Engineering Summa Cum Laude

***Relevant Courses***: C, C++, Database Management Systems, Data Mining, Big Data, Distributed System, Object Oriented Programming, Software Engineering, Embedded System.

**Experiences**

**Southern Illinois University***,* Carbondale, IL, USA Jan 2020-Present *Graduate Research Assistant*

* Led by Prof. Dr. Chun-Hsi Huang, with the focus of Extreme-Scale Computing and Data Analytics, Computational Biology using R and python languages.
* Worked on Human Genome Diversity Project dataset to analyze and predict the population structure inference using PCA and clustering techniques.
* Performed research on the comparison of compression algorithms specifically for large-size human gene data.

**Nepal Academy of Science and Technology,** Lalitpur, Nepal July 2018 – Dec 2019

*Research Assistant*

* Developed and deployed IoT-based projects such as Smart Homes, Smart Agriculture using Raspberry PI, Arduino, and MQTT protocol in over 25 client locations.
* Improved project performance by transferring old data to the MongoDB database.
* Managed projects with efficient time management and proper prioritization of assigned tasks.
* Coordinated with other peers, communicated daily progress with a coordinator, and actively participated in the meeting.

# Noteworthy Projects

**Social Distance Monitoring using Deep Learning** August 2020 – December 2020

**–** A project to monitor the social distance to reduce the spread of COVID-19. In this project, a Deep Learning algorithm is implemented for the detection of people in the video/image and utilized the OpenCV library for image processing to find out the distance between detected people.

*Technology involved:* Python, OpenCV, and Deep Learning.

**Recommendation System using web usage mining for e-commerce users** January 2017 – August 2017

**–** A complete web-based e-commerce system to recommend the best product using past data analysis.

*Role:* Full-stack developer.

*Technology involved:* PHP, HTML, CSS, MySQL, JS, and Bootstrap.

# Awards and Honors

* Graduate Research Assistantship for being few of the best applicants for graduate studies.
* Merit-based scholarship to complete undergraduate studies and financial awards throughout every semester for good grades.
* Member of PHI KAPPA PHI for ranked scholastically in the top 10% of the class.