SAJESH ADHIKARI

Address : 421 Prentis Avenue, Vermillion SD
Mobile Number : +1 (605) 521-7024
Email : saj3sh@gmail.com
LinkedIn : https://www.linkedin.com/in/saj3sh/

Master's student in Computer and Information Sciences with over 4 years of professional full-stack software development experience. Academic interest and expertise in machine learning and blockchain technologies, with professional experience in US healthcare as well as banking and digital assets domains.

INVOLVEMENTS

Software Engineer at Yirifi.ai
Feb 2023 - Aug 2024
- Worked as a Software Engineer, specializing in blockchain technology and AI-powered risk analysis for digital assets.
- Led backend development using Node.js and MongoDB, along with Python scripting, focused on the Web 3.0 domain.

Senior Software Engineer at Cedargate Technologies LLC.
Nov 2021 - Aug 2024
- Started as a full-time Software Engineer (Nov 2021 to Jan 2023).
- Promoted to Senior Software Engineer and Team Lead, with a focus on software development using .NET technologies in the US healthcare sector.

Software Developer (Trainee Assistant) at Siddhartha Bank Ltd.
Feb 2021 - Nov 2021
- Contributed to the Product Development Unit within the SBL Payment Solutions Department (PSD).
- Primarily responsible for automation tasks and in-house software development.

.NET Developer at Podamibe Nepal Pvt. Ltd.
Jan 2020 - Feb 2021
- Worked as a full-time .NET developer.
- Developed and maintained multiple projects, primarily using .NET technologies for the backend and React.js for the frontend.

Intern (Software) at LIS Nepal Pvt. Ltd.
May 2019 - Aug 2019
- Completed 3 months software engineering internship program at LIS Nepal.
- Worked mainly on a web application based on ASP.NET with C#, SQL Server and IIS.

President at Robotics Club of Kathmandu Engineering College
Jun 2018 - Jul 2019
- Participated in and led teams for various technological events and activities across software and hardware categories.
- Organized robotics competitions and conducted numerous workshops and seminars.

Executive Member at KEC IT Club
Aug 2016 - Jul 2019
- Collaborated in organizing and volunteering for various IT-related events, fostering collaborative team-based learning environments.

EDUCATION

Master's in Computer and Information Sciences   **2024 - Present**
- University of South Dakota, Vermillion, SD

Bachelor's Degree in Computer Engineering   **2015 - 2019**
- Tribhuvan University
- Kathmandu Engineering College, Kalimati

Intermediate Level (+2): Physical and Biological Science   **2013 - 2015**
- Higher Secondary Education Board
- Araniko Awasiya Higher Secondary School, Biratnagar

School Leaving Certificate   **2013**
- Government of Nepal
- Eden National Secondary Boarding School, Biratnagar

TECHNICAL SKILLS

Programming Languages
- C#, Python, Visual Basic (VB), JavaScript, C, C++

Frameworks and Tools
- .NET Core, Blazor WebAssembly, ASP.NET (WebForms and MVC), ORMs like Entity Framework and Dapper, ADO.NET
- Django, Flask, OpenCV, Numpy, Pandas, Matplotlib, SQLAlchemy
- Node JS, React JS, React Native, JQuery, TypeScript

Database and others
- SQL Server, MongoDB, PostgreSQL, MySQL
- Git and GitHub, Excel VBA Macros and Office Automation

PROJECTS

Lumbar Spine Degenerative Classification using MRI Images
- A DenseNet-201-based architecture designed to predict the severity of lumbar spine degeneration using MRI images.
- **Uses:** Tensorflow, Keras, Python, OpenCV

Attendance System Using Face Recognition
- A face recognition system based on transfer learning, to automate the process of taking attendance.
- **Uses:** Python, OpenCV, Flask, Numpy, dlib, PostgreSQL, SQLAlchemy, HTML, CSS, JavaScript

Automatic Akhada Bot
- Designed for a National-level Robotics competition, this autonomous robot utilizes image processing and object detection to navigate its environment and push opponents
- **Uses:** Arduino, Raspberry Pi, Python, OpenCV

Who is speaking?
- Developed a voice-based caller identification system using Gaussian Mixture Model for speaker recognition, securing 3rd place in a national-level code camp competition.

- **Uses:** Python, Flask, Numpy, Sklearn, Scipy, PostgreSQL, SQLAlchemy

MetaMusic
- A song identification system developed using a custom hash-based algorithm ensuring fast and reliable matching.
- **Uses:** Python, Flask, Numpy, Scipy, PostgreSQL, SQLAlchemy, HTML, CSS, JavaScript

Self Balancing Robot
- A two-wheeled, self-balancing robot built using an Arduino microcontroller, incorporating the concept of a PID controller.
- **Uses:** Arduino, MPU sensor (accelerometer and gyroscope)

PARTICIPATIONS AND ACHIEVEMENT

Yantra 7.0
- Organized by Robotics Association of Nepal

Yomari Code Camp 2019
- Organized by Locus and Yomari Pvt. Ltd.
- **3rd Position**

Yomari Code Camp 2018
- Organized by Locus and Yomari Pvt. Ltd.

REFERENCES

Sudeep Shakya
Head Of Department
Department of Computer Engineering
Kathmandu Engineering College
Phone: +977-9851036634
Email: sudeep.shakya@kecktm.edu.np

Sagun Manandhar
Former Head of Department, Associate Professor / Research Member
Department Of Electronics Communication And Information Engineering
Kathmandu Engineering College
Phone: +977-9841322488
Email: sagun.manandhar@keckist.edu.np