Naresh Prasad Koirala

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Full-Stack Developer | Software Developer | Embedded & Software Systems

PROFESSIONAL SUMMARY

Software Developer with 3 years of experience building applications using C#, .NET, MAUI, and SQL. Strong background in full-stack development with additional expertise in integrating software with embedded systems. Passionate about creating efficient, user-friendly applications and solving real-world problems through code.

SKILLS

- Programming Languages: C, C#, Python, SQL, NoSQL, HTML5, CSS3, JavaScript, XAML
- Frameworks & Libraries: .NET, .NET MAUI, ASP.NET Core, Blazor, WinForms, AJAX, jQuery
- Software-Hardware Integration: Embedded firmware + app integration, real-time debugging
- Application Development: Full-stack C#/.NET apps, MAUI cross-platform apps, Windows Forms

EDUCATION

NAIT | Edmonton, CA | 2023 – 2025

- **Course: Computer Engineering Technology**
  Where I developed software applications using C# and .NET by designing and implementing full-stack solutions and embedded system integrations, resulting in practical skills to deliver reliable, real-world software projects.

PROJECTS

Portfolio Website: nareshkoirala.github.io/MineRepo/

Resume Builder App

Developed a cross-platform Resume Builder app using .NET MAUI that integrates multiple job site APIs and user input validation, enabling AI-driven generation of custom resumes and cover letters tailored to specific job descriptions, with downloadable DOCX output.

- Integrated multiple job site APIs to fetch and validate job listings based on user preferences.
- Implemented AI-powered customization to generate tailored resumes and cover letters matching selected job descriptions.
- Added functionality to input job description URLs, automatically building personalized application documents downloadable as DOCX files.

Automated Connect 4 Game

Developed a robotic Connect 4 system combining motorized hardware and software for automated gameplay. With multiple difficulty levels. Integrating hardware and software seamlessly.

- Programmed Raspberry Pi Pico in Micro Python for game logic and AI bot.
- Created a web interface on ESP32 for real-time gameplay and interaction.
- Designed motorized hardware for precise token placement on the board.

SpO2 Monitoring System Design

Designed and developed a custom STM32-based SpO2 monitoring PCB using Ki-Cad, programmed firmware in C with Cube IDE to process sensor data, resulting in a fully functional, tested prototype fabricated via PCBWay.

- Created schematic and PCB layout in Ki-Cad for STM32 and SpO2 sensor integration.
- Developed embedded C firmware to acquire and process SpO2 data using Cube IDE.
- Managed PCB fabrication and conducted hardware testing to validate system performance.