# Samyak Bajracharya

Software Engineer focused on building high-performance, interactive web applications using React.js and Next.js. Passionate about crafting seamless user interfaces, optimizing performance, and writing clean, maintainable frontend code. Committed to advancing as a specialist in modern frontend development.

# **⋈** SKILLS

# **Languages & Frameworks**

JavaScript (ES6+), TypeScript, React.js, Next.js

#### Soft Skills

Agile Collaboration, Debugging, CI/CD Basics, UI/UX Awareness, **Problem Solving** 

# **Styling & Animation**

TailwindCSS, Material UI, GSAP, Flowbite-React, React Router,

# **Testing & Performance**

Jest, Cypress, Lighthouse, Lazy Loading, Image Optimization, Code Splitting

#### **State & API Management**

Redux Toolkit, Context API, TanStack Query, REST APIs, Firebase

#### **Tools & Platforms**

GitHub, GitLab, Vite, Yarn, NPM, Postman, Figma, Vercel, MySQL

# **PROJECTS**

### **E-commerce Website** *⊘*

Tech Stack: React.js, Redux, Context Api, Firebase, Tailwind CSS, GitLab

- Collaborated in an Agile team using Jira for task tracking and GitLab for version control.
- Implemented global state management using Redux Toolkit and Context API to handle product data and cart states efficiently.
- Integrated Firebase for real-time database and used Node is to simulate secure API calls during development.
- Boosted Lighthouse SEO and performance score from 75 to 95+ by optimizing image loading, lazy loading components, and eliminating render-blocking scripts.

#### **Travel Planner** *⊘*

Tech Stack: Next.js, RapidAPI, Tailwind CSS, flowbite-react, Github, GSAP, Vercel

- Built a travel planning platform with real-time weather, currency exchange, and integrated Leaflet.js for interactive map visualization
- Connected RapidAPI to fetch real-time data for weather conditions and currency conversions with custom UI cards for display.
- Ensured content was SEO-friendly using Next.js's SSR capabilities and Firebase's dynamic route indexing.

# AI Trash Detection Website &

Tech Stack: React.js, Python, Pytorch, YOLOv5

- Developed a machine learning-based web application to detect and classify trash.
- Trained and fine-tuned YOLOv5 object detection model on a custom dataset, achieving high accuracy for real-world waste classification.
- Reduced model inference time by 20% by applying OpenCV preprocessing techniques.

# **CERTIFICATIONS & BOOTCAMPS** 11/2024 - 02/2025 React.js *⊘* Credential ID: B21372 **Broadway Infosys Frontend Development Libraries** *⊘* 11/2024 - 12/2024 freeCodeCamp JavaScript Algorithms and Data Structures ∂ 11/2024 - 12/2024 freeCodeCamp

# **№** EDUCATION

**Expected Graduation:** 2025

**Bachelor's in Computer Engineering** Nepal College of Information Technology

**Relevant Courses:** 

- Mobile And Web Application Technology
- Object Oriented Software Enginnering
- Data Structure And Algorithms
- Artificial Intelligence

Lalitpur, Nepal