BIGYA BAJRACHARYA

📞 +1 (423) 672-9222 | ✉ bigya.in.tech@gmail.com | 🔗 LinkedIn | ⭘ GitHub | bigyaa.github.io

🌐 TN, USA (Open to relocation)

PROFESSIONAL SUMMARY

Software Engineer with **5+ years** of experience leveraging **React, TypeScript, Node.js, Python, and AI-powered solutions** to build scalable, high-impact web applications. Proven ability to **optimize frontend performance, accelerate development cycles,** and **integrate cutting-edge AI models.** Passionate about delivering **intelligent, efficient, and user-friendly** applications that drive **business success,** I don't just build products—I make them **smarter, faster, and more user-focused.**

EXPERIENCE

East Tennessee State University   **May 2024 - Present**
Full-Stack Developer Volunteer   *Tennessee, USA*
- Led the development of the frontend architecture and transcription system for an AI-powered archival platform using React, Python, Whisper, and TensorFlow, enhancing research accessibility by 200%.
- Engineered NLP & LLM-driven solutions, achieving 95% transcription accuracy & 79% classification accuracy, enabling automated data processing and actionable insights.

Fusemachines Inc.   **Aug 2020 - Aug 2022**
Software Engineer, Full Stack   *New York, USA*
- Redesigned a legacy codebase into a scalable microservices architecture, reducing feature release cycles by 40% and enabling faster, more efficient deployments.
- Owned full SDLC execution for an enterprise education platform, eliminating development bottlenecks by 25% and ensuring on-time project delivery.
- Optimized GraphQL and RESTful APIs, reducing API response times by 30%, improving backend efficiency and user interaction speeds.
- Automated CI/CD workflows using Docker, GitHub Actions, and Jenkins, decreasing deployment overhead by 45%, enabling rapid iteration in a competitive market.
- Provided mentorship and technical leadership, supporting engineering team growth through onboarding, code reviews, and agile implementations.

Citytech   **Jun 2019 - Aug 2020**
Software Engineer, Full Stack   *Kathmandu, Nepal*
- Developed key components of a fintech platform handling $10M+ in monthly remittances, ensuring secure transactions and high availability.
- Boosted UI performance by 30%, leveraging optimized state management and React/Redux enhancements.
- Implemented an automated Jest/Enzyme-based testing infrastructure, reducing production bugs by 40%, improving overall software reliability.
- Led cross-functional collaboration between frontend, backend, and DevOps teams to improve scalability.

Freelance   **Jan 2019 - Jul 2022**
Full Stack Software Engineer   *Remote*
- Independently led full-cycle development of several projects, handling both product management and technical implementation, ensuring alignment between business needs and engineering execution.
- Designed and built working prototypes for early-stage startups, contributing to successful funding rounds.

- o Owned stakeholder communication, translating complex business requirements into scalable technical solutions.
- o Achieved an 80% client retention rate by combining strong leadership, independent problem-solving, and effective collaboration, delivering high-value products on schedule.

EDUCATION

East Tennessee State University   **Aug 2022 - May 2024**
Master's, Computer Science (AI & ML)   GPA: 3.97

St. Xavier's College, Tribhuvan University   **Aug 2014 - Dec 2018**
Bachelor's, Computer Science   *GPA: 3.7*

TECHNICAL SKILLS

- o **Programming**: JavaScript, TypeScript, Python, Java, C/C++
- o **Frontend**: React.js, Redux.js, TypeScript, Tailwind CSS, HTML5/CSS3, UI/UX Optimization, Performance Optimization, Accessibility
- o **Backend**: Node.js, Express.js, Django, REST APIs, GraphQL, Microservices
- o **Databases**: PostgreSQL, MongoDB, MySQL, Redis, Firebase, NoSQL
- o **Cloud & DevOps**: AWS, Docker, Kubernetes, GitHub Actions, Jenkins, CI/CD Pipelines
- o **Testing & Agile**: Jest, Selenium, Enzyme, TDD, Agile, SDLC, JIRA, Confluence
- o **AI & Data Science**: NLP, LLMs, TensorFlow, PyTorch, scikit-learn, Pandas, NumPy
- o **Data Visualization**: Plotly, D3.js, Matplotlib, Tableau

PROJECTS ✐

AI-Driven Archival Platform | *React, JavaScript, Python, Whisper, NLP*

- o Led the frontend architecture and engineered NLP-driven search and content classification models to enhance retrieval efficiency, improving research accessibility by 200%.

College Admission & Academic Management System | *React, Redux, Node.js, PostgreSQL, TypeScript, AWS*

- o Developed a scalable education platform, serving 60,000+ users with 99% uptime, ensuring seamless enrollment and academic operations.
- o Led the frontend architecture, improving state management and performance, enhancing student and administrator experience.

AI-Enhanced Talent Platform | *React, Node.js, TypeScript, GraphQL, AWS, D3.js*

- o Developed several full-stack components for the platform, collaborating with cross-functional teams.
- o Improved API performance by 30% through GraphQL optimization and caching strategies.
- o Built interactive dashboards and candidate search functionalities, enhancing user experience and engagement.

CERTIFICATIONS ✐

- o Software Engineer Certificate – HackerRank (Oct 2024)
- o SQL (Advanced) Certificate – HackerRank (Sep 2024)
- o The Nuts and Bolts of Machine Learning – Google (May 2024)
- o Career Essentials in Sustainable Tech – Microsoft (Mar 2024)