Sarthak Deshmukh

+1 857-397-6144 | deshmukh.sar@northeastern.edu | linkedin.com/in/sarthakdeshmukh1999 | Boston, MA
github.com/sarthak-deshmukh1999 | sarthakdeshmukh.com

SUMMARY

Software Engineer Intern Candidate with **3+ years** of experience developing scalable, high-performance systems using **Python, C++, and C#**. Strong foundation in **distributed systems**, **algorithms**, **object-oriented design**, and **data structures**. Experienced in building automation solutions and backend infrastructure across cloud platforms like **AWS, Azure, and GCP**. Passionate about robotics, optimization, and problem solving in fast-paced, research-driven environments.

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, JavaScript (ES6+)
Frameworks & Libraries: React, Redux, Node.js, Express, Material-UI, .NET Core
Cloud & DevOps: AWS (EC2, S3, IAM), Terraform, GitHub Actions, CI/CD, Docker
Concepts: Object-Oriented Programming, Data Structures, Algorithms, REST APIs, SDLC, Agile
Certifications: Azure Developer Associate, Azure Fundamentals, Microsoft Certified Professional

EXPERIENCE

Full Stack Developer   **Jun 2021 – Jul 2024**
Accenture   *Mumbai, India*
- Developed scalable **GenAI chatbot** using **Python, C#, .NET Core, React** with **Azure DevOps CI/CD** and **MySQL** integration.
- Built multi-tier systems using **object-oriented principles** and **distributed computing** techniques to ensure fault-tolerant production deployments.
- Optimized API response times through **algorithmic improvements** and **query optimization**, reducing latency for real-time user interactions.
- Enhanced **Microsoft Bot Framework** dialog flow and intent classification using **Cognitive Services**, achieving **10% latency reduction** and improved accessibility.

Software Engineer Intern   **Jul 2020 – Mar 2021**
IT Networkz Infosystems   *Nagpur, India*
- Developed scalable web applications using **Java and React** with APIs for optimized performance.
- Built UI components with **React and TypeScript**, implementing **Hooks and HOCs** while minimizing prop drilling.
- Engineered secure **RESTful APIs** using **Express.js, Node.js, and MySQL**, deployed on **AWS EC2** with **RDS**.
- Accelerated deployment speed by **40%** implementing **CI/CD pipelines** with **GitHub Actions and AWS CLI**.

PROJECTS

Semantic Browsing History Chrome Extension 🔗 | Python, Google Cloud Run, Docker, Pinecone   **May 2025**
- Built semantic browser search agent using **natural language queries** and stored data semantically in **PostgreSQL**.
- Deployed scalable **Flask API** on **Google Cloud Run** with **Docker** and **Artifact Registry** integration.
- Integrated **Gemini GenAI** for webscraping and **Pinecone** vector DB with **Next.js** UI for low-latency search.

AWS Cloud Infrastructure 🔗 | Packer, Terraform, EC2, Load Balancer, Auto Scaler   **Jan 2025 – April 2025**
- Provisioned scalable AWS infrastructure using **Terraform modules** and automated deployment with **GitHub Actions**
- Secured infrastructure with **IAM roles**, **KMS encryption**, and **Secrets Manager** for access control.
- Configured **Load Balancers**, **Route 53**, and scaling policies for high availability and fault tolerance.

AI Course Advisor 🔗 | GitHub 🔗 | React, Node, TypeScript, Redux   **Nov 2024 – Dec 2024**
- Built AI course advisor using **React, Node.js, Express** and **Llama-70b via Groq API** for smart recommendations.
- Implemented secure **JWT** authentication with HTTP-only cookies for session management and user protection.
- Used **Redux** to manage global state, monitor user activity, and dynamically update course suggestions in real time.
- Deployed the application UI on **Vercel** and server on **Railway**.

EDUCATION

Northeastern University   **Boston, MA**
Master of Science in Information Systems   *Sep 2024 – Graduating Apr 2026*
Nagpur University   **Nagpur, India**
Bachelor of Engineering in Computer Science   *August 2017 – April 2021*