

# Vinayak

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## Skills

**Languages:** C, Express.js, Python, JavaScript, Node.js, SQL, HTML, CSS, Data analytics, Web Security, Web optimization

**Technologies & Tools:** Node.js, Express.js, MongoDB, RESTful APIs, JavaScript, HTML, CSS, React.js, Git, GitHub, Vercel, Postman, JSON, Mongoose, Cloud Deployment, Authentication & Authorization, EJS, Backend Architecture, API Integration

## Work Experience

Implemented robust security best practices by designing and integrating secure authentication and authorization systems, enforcing strong data validation, and mitigating common web vulnerabilities such as SQL injection, XSS, and CSRF attacks. Strengthened backend resilience with role-based access control and encrypted data handling. Additionally, optimized overall application performance through advanced techniques like code splitting, lazy loading, query optimization, and efficient database indexing — resulting in faster load times, improved scalability, and smoother user experience.

## Education

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**SRINIVAS INSTITUTE OF TECHNOLOGY**

Sep 2023 - Jun 2027

B.E. in Information Science and Engineering

**CGPA: 7.25/10**

Relevant Coursework: Object Oriented Programming, Databases, Discrete Maths, Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning, Data Mining, Advance Data Structures and Algorithms, Information Retrieval, Image Processing

## Project Work

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- **VScanner (2025):** Developed a web-based vulnerability scanner that detects and reports website security flaws including misconfigurations, broken authentication, and SQL injection risks. Implemented modular scanning logic using Node.js and Express.js, improving detection accuracy by 30% through optimized request handling and asynchronous processing. Integrated MongoDB for log storage and analytics, enhancing overall scanning speed by 25%.
  - **Technologies:** Node.js, Express.js, MongoDB, EJS, REST APIs, Security Testing
  - **CacheCraft (2025):** Designed and implemented a high-performance caching system to optimize API response times and reduce server load. Leveraged Redis and Node.js to create an adaptive cache layer with intelligent invalidation policies, improving response time by 40% and reducing redundant API calls by 35%. Built monitoring dashboards to track cache hit/miss ratios and performance metrics.
  - **Technologies:** Node.js, Redis, Express.js, REST APIs, Performance Optimization