

Methran Gunasekaran

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Highly competent full-stack Software Engineer with over 2 years of experience building scalable and secure web applications. Built core features for Document360, a SaaS platform used by millions worldwide, including customers like NHS, Microsoft, and Pfizer. Proficient in .NET (C#) and Angular, with deep knowledge in SQL Server and MongoDB.

WORK EXPERIENCE

Kovai.co

May. 2022 - May. 2024

Software Engineer - [Document360](#)

Coimbatore, India

- Implemented fine-grained access control for complex document hierarchies, introducing dynamic permission rules and optimized LINQ queries to streamline content visibility and security management.
- Upgraded authentication from Identity Server 4 to Duende Identity Server 7, improving performance by 30% and enabling advanced SSO workflows (including IdP-Initiated SAML).
- Achieved significant cost savings of approximately £12,000 per year by opting out of a commercial library for handling runtime authentication providers. Instead, developed a custom solution, enhancing system flexibility.
- Redundant data cleanup required manual database scripts; built automated background jobs with scheduling and validation logic, reducing storage usage by 20% and ensuring consistent data hygiene.
- Legacy authentication and caching caused performance bottlenecks; introduced JWT-based authentication and multi-layer caching (in-memory + Redis), improving API response time by ~10%.
- Enhanced infrastructure by blocking bot logins with Google reCAPTCHA and mitigating DDoS risks via Cloudflare reverse proxy.
- Delivered major zero-downtime production deployments via Azure CI/CD with Blue-Green strategy.

PROJECTS

Verbatim | .NET 9, Angular, MongoDB, SignalR, FastAPI

- Designed platform to improve typing performance by strengthening muscle memory through practice.
- Incorporated Adaptive Typing Session, where users practice problematic word patterns using Fuzzy Search.
- Implemented real-time sessions where users can compete with friends via SignalR.
- Integrated GenAI to provide personalized feedback and suggestions on weak areas and error trends.
- Deployed using Vercel (Client), Rail gun (Server) and Mongo Atlas (MongoDB).

AWARDS & RECOGNITION

- Qualified, UK & Ireland Programming Contest 2025 - Representing University of Liverpool
- Team of the Quarter, Kovai.co – Recognized for outstanding performance within the engineering team
- 1st Place, TopCoder Challenge – Won among 200 teams by solving advanced algorithmic problems
- Scholarship Recipient, LWT Academy – Educational trip to Singapore for achievements in coding contests

EDUCATION

University of Liverpool

Sep. 2024 - Sep. 2025

Master of Science in Advanced Computer Science, Predicted Distinction

Liverpool, United Kingdom

Sri Krishna College of Arts and Science

Sep. 2020 - Sep. 2023

Bachelor of Science in Computer Technology, Distinction

Coimbatore, India

TECHNICAL SKILLS

- **Languages:** C#, C++, TypeScript, Python
- **Frameworks/Libraries:** .NET Core, Angular, SignalR, FastAPI, TailwindCSS
- **Databases:** SQL Server, MongoDB, Redis
- **Tools & DevOps:** Visual Studio, Postman, Azure DevOps, Git, YAML Pipelines, Vercel