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EXPERIENCE

■ Horizon Inc.

Senior Software Engineer | 2018 - Present

- **Sessions – Expert Booking & Video Consultation Platform:** Developed a full-featured platform connecting users with domain experts for one-on-one professional advice.
 - Built with Next.js, NestJS, and WebRTC for in-app advanced video calling.
 - Implemented secure authentication, scheduling, payments (with stripe), in app video call and real-time notifications. On the
 - Demo deployed at <https://sessions.yonashalefom.com>.
 - **Key Technologies Used:** Next.js, Nest.js (Backend), MongoDB, Typescript, Stripe, Shadcn & Tailwind, Socket.io, Algolia, Sentry, @tanstack/react-query, React.js, AWS, Redis
 - **Repo:** <https://github.com/yonashalefom/sessions-frontend-shadcn> (private repo, will provide access upon request)
- **Local Places Discovery App:** Mobile-first platform enabling users to discover local places via geolocation based search and listings.
 - Built with Ignite's React Native framework, optimized for cross-platform performance.
 - Integrated real-time maps, location services, user reviews, and booking and listing multi-step flows.
 - Designed for high scalability and global marketplace functionality.
 - Beautiful User Interface. Demo available upon request.
 - **Key Technologies Used:** React Native, Expo Go, Ignite React Native, Nest.js (Backend), MongoDB, Typesense, AWS, Redis
 - **Repo:** <https://github.com/yonashalefom/tiwi> (private repo, will provide access upon request)
- **Food Delivery Platform (UberEats Scale)**
 - Architected a microservices-based delivery system using NestJS, MongoDB, and React Native.
 - Implemented order management, rider tracking, and real-time delivery updates.
 - Designed with high availability and scalable cloud infrastructure.
 - **Key Technologies Used:** React Native, Next.js, Expo, Apollo GraphQL, Nest.js, MongoDB, PostgreSQL, Typesense, Go (Minor), C++ (Minor), AWS, Redis
- **Telecom Voucher Distribution (Enterprise Application)**
 - Designed and built a financial application using Node.js, MongoDB, and AWS, processing 10 - 15M+ daily transactions with 99.99% uptime. Integrated payment gateways including Stripe and PayPal, generating significant revenue.
 - This application is generating around 8.7 million dollars yearly.
- **Led Monolithic to Microservices Migration:**
 - Led the migration of a monolithic Node.js application to a Docker and Kubernetes based microservices architecture. The migration involved breaking down over 50 services, resulting in better performance, improved scalability, and faster deployment cycles. Utilized RabbitMQ for messaging to ensure seamless communication between microservices.
- **Optimized Legacy Application Performance:**
 - Enhanced application performance by over 80% using distributed computation, background workers, database query optimization, and caching mechanisms like Redis. Reduced processing time for heavy operations from 20 minutes to under 30 seconds.

- **Key Achievements:**

- Scaled production systems handling 10M+ daily requests with 99.999% uptime.
- Led technical interviews and mentoring for 15+ engineers.
- Project management experience working across multiple time zones, balancing conflicting deadlines.
- Helped the company generate significant revenue via its core products.

- **CapaTipLism - (US Startup)**

Senior Software Engineer | Jul 2023 - Jan 2025

- **AI & LLM Projects:**

- **LLM-Powered Interview Preparation Tool:**

- Built a platform leveraging Large Language Models (LLMs) to simulate technical and behavioral interviews.
- Features: real-time Q&A generation, feedback scoring, adaptive difficulty adjustment, and mock interview scheduling.
- Tech: Next.js, LangChain, OpenAI API, Vector DB (Pinecone), React Query.

- **GenAI Knowledge Assistant:** Built a Retrieval Augmented Generation (RAG) pipeline using LangChain + OpenAI APIs for enterprise document Q&A. Integrated with LangChain + OpenAI, deployed with serverless infrastructure.

- **Locally Served AI Data Center Integration**

- Deployed and integrated on-premise AI models for organizations requiring data privacy & compliance.
- Used open-source LLMs (LLaMA, Falcon, Mistral) fine-tuned on domain data.
- Optimized GPU clusters for low-latency inference and cost efficiency.

- **Chatbots & Customer Support Automation**

- Built domain-specific AI chatbots for SMEs, integrating fine-tuned GPT models for customer service.

- **Blockchain & Crypto Projects**

- **Smart Contract Development:** Built Ethereum based contracts for secure digital asset transfers & tokenized services.
- **Crypto Wallet Integration:** Integrated MetaMask & WalletConnect into web/mobile apps.
- **NFT Marketplace (Prototype):** Designed an NFT minting & trading system with IPFS storage and on-chain verification.

- **EEDP - (UNDP Backed Company)**

Senior Software Engineer | Jul 2021 - Mar 2024

- **E-Commerce Platform for SMEs:** Led a team of 10 engineers and designers to create a robust e-commerce platform for SMEs, driving a 14% sales increase within three months. And 28% in 6 months. Leveraged AWS Lambda, S3, and Elasticsearch for search capabilities and scalability.
- **Management Information System:** Developed an enterprise grade MIS for SMEs, improving data collection and reporting efficiency by 72%. Ensured seamless integration with existing tools through GraphQL APIs.
- **Cross-Functional Team Leadership:** Effectively communicated technical requirements with non-technical stakeholders, fostering a collaborative environment that ensured project deadlines were consistently met.

■ Independent Software Consultant (Remote)

Jan 2018 - Present

- Providing end-to-end software development and consulting services for startups, enterprises, and international organizations.
 - **Key Achievements:**
 - Designed, developed, and deployed enterprise-grade systems across eCommerce, fintech, healthcare, and hospitality sectors.
 - Acted as the primary client contact, conducting requirement workshops, technical interviews, and stakeholder updates.
 - Balanced multiple projects simultaneously, ensuring timely delivery and alignment with business goals

S K I L L S

- **Backend Development:** Nest.js • Node.js • Express • GraphQL • REST APIs • TypeScript • JWT & OAuth Authentication • Role/Resource Based Access Control • WebSockets • Event-Driven Architecture • Serverless Functions • API Rate Limiting & Throttling • Logging & Monitoring (Winston, Morgan, Sentry)
- **Frontend Development:** Next.js • React.js • ReactRouter 7 (Framework Mode) • Redux • Zustand • Context API • Material UI • Tailwind CSS • Shadcn • Apollo GraphQL • TypeScript • React Query • SSR & SSG • Progressive Web Apps • Responsive & Accessible UI Design
- **Mobile Development:** React Native • Expo • Redux & Zustand for State Management • TypeScript • Gesture Handling & Animations (Reanimated, Gesture Handler, Lottie) • Performance Optimization & Profiling • Offline Support & Caching • Push Notifications • Deep Linking • App Store & Play Store Deployment
- **AI & Generative AI:** Large Language Models (LLMs: GPT, LLaMA, Falcon, Mistral) • LangChain • Retrieval-Augmented Generation (RAG) Pipelines • Vector Databases (Pinecone, Weaviate, FAISS) • Fine Tuning & Prompt Engineering • On-Premise AI Deployment & Optimization (GPU clusters, vLLM, Hugging Face Transformers) • Embeddings & Semantic Search • Generative AI for Video, Chatbots & Recommendation Systems
- **Blockchain & Crypto:** Solidity • Smart Contract Development • Hardhat • Web3.js • Ethers.js • Polygon & Ethereum Networks • IPFS • NFT Minting & Marketplaces • Wallet Integration (MetaMask, WalletConnect) • Tokenized Services & Payments
- **Database Management:** MongoDB • PostgreSQL • Redis • Database Indexing & Query Optimization • Data Modeling • Transactions & ACID Compliance • DB Scaling & Replication • Caching Strategies • Mongoose / Prisma ORM
- **Cloud & DevOps:** AWS (S3, EC2, Lambda, CloudFront) • Docker • Kubernetes • CI/CD (GitHub Actions) • Serverless Architecture • Load Balancing & Auto Scaling • Monitoring & Logging (CloudWatch, Prometheus, Grafana)
- **Testing & Quality Assurance:** Unit Testing (Jest, Mocha) • Integration Testing • E2E Testing (Cypress, Selenium) • API Testing (Postman, APIDog) • Test-Driven Development (TDD) • Code Coverage & Linting • Continuous Testing Pipelines
- **Microservices & Messaging:** Microservices Architecture • RabbitMQ • Kafka • Message Queues & Pub/Sub • Service Discovery • API Gateway Patterns • gRPC • Event Sourcing
- **Security & Performance:** OWASP • Input Validation & Sanitization • Encryption & Hashing • Rate Limiting & Throttling • Caching Strategies • Performance Profiling & Optimization • CDN Usage
- **Software Engineering Principles:** Object-Oriented Programming (OOP) • SOLID Principles • Clean Code • Design Patterns • Domain-Driven Design (DDD) • Agile & Scrum Practices • Code Reviews & Mentorship

Note: I'm not just listing tools to impress anyone. Every technology here is something I've actually used in real projects. Some I'm stronger at than others, but most of these are areas where I've built, shipped, and maintained real-world applications.