

Peter Shin

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Skills

Languages: Typescript, C#, Python, SQL, PostgreSQL, Javascript, Go, Java

Frameworks/Libraries: React, Next.js, Node.js, .NET

Technologies: Elasticsearch, AWS, GCP, FastAPI, Kafka, Websockets

Experience

CoStar Group | Software Engineer, Full Stack | Richmond, VA July 2023 – Present

- Led and built an extensible event mediator service in C# with .NET, leveraging AWS SQS for asynchronous processing and handling millions of requests monthly, serving as a key component of a new Homes.com feature which drove all-time-high premium member retention.
- Designed and implemented a .NET SDK to create templated, scalable ETL workflow generation for backend systems using AWS SQS, Elasticsearch, and MS SQL Server. Integrated teams save weeks of development efforts to achieve an average of 80% reduction of database resource utilization on read queries.
- Led the development of a public-facing scheduling interface written in React Typescript that plays a key role in a 2024 feature launch for Homes.com generating \$40M+ in revenue.
- Designed and deployed a REST API proxy for Elasticsearch, enabling real-time data querying and transformation. Used by 30+ teams, reduced data retrieval times by 75% and offloaded 80% of direct database queries.

Amazon Web Services | Software Development Engineer Intern | Arlington, VA May 2022 – Aug 2022

- Leveraged multiple AWS cross-domain services to create a new product prototype.
 - Built and demonstrated a POC that addresses a common customer need to quickly and safely source files in repositories located in lower security domains.
 - Utilized Python and Typescript to model and deploy AWS infrastructure.
 - Architected the solution leveraging multiple AWS services, including S3, Lambda, and API Gateway.
 - Wrote XML schema definitions for generic customer-use cases to streamline onboarding new clients.
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Education

Bachelor of Science in **Computer Science**, Minor in **Data Science**

May 2023

University of Virginia, Charlottesville, VA

Projects

LLM CLI Personal Assistant | <https://github.com/PeterShin23/MyAssistant> Jun 2025

- An LLM-Powered CLI Tool that can record your screen and mic to act as your personal assistant and predict your needs with configurations to optimize experience.
- Conversation context stored per CLI session window.
- Learned Go and used OpenAI's GPT-4o model and Whisper API for text, image analysis and audio transcription.

theshowcase.me/peter.shin | <https://github.com/PeterShin23/LazyShelf> Dec 2024 - Present

- Previously deployed using AWS Elastic Beanstalk, demo available here <https://tinyurl.com/yf6hvufm>
- Built a photography portfolio web application enabling users to showcase their Instagram content by integrating Meta's Instagram Graph API for seamless login and media retrieval.
- Developed the frontend using React with TypeScript and implemented backend services in Python.
- Deployed a serverless REST API using AWS API Gateway, Lambda, S3, DynamoDB, and CloudWatch.
- Automated user access token rotation using Goroutines to ensure uninterrupted API access.