MOEED

SENIOR SOFTWARE ENGINEER
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Agile and diligent, I am a growth-driven Senior Software Engineer with a 6+ year track record in startup environments, specializing in product development and digital innovation. My proficiency in modern open-source technologies is matched by a commitment to radical candor and a talent for transforming complex technical ideas into clear, actionable strategies. Known for self-driven leadership, I excel both independently and as a collaborative team leader, consistently steering enterprise-wide development projects to success.

Work Experience

Full-Stack Developer * Team Lead at Trinity Education Group – 11/2023 to Current

At **TEG Technologies**, I am leading the development of GenAi, an advanced AI-driven system designed to assist instructional designers in creating effective lesson plans and classroom strategies.

- **Spearheaded** cross-functional teams in GenAi creation, focusing on AI integration for educational tool design.
- **Engineered** AI functionalities to enhance lesson planning and classroom strategy development.
- **Pioneered prompt evaluation** techniques with analytical pipelines and **real-time** analytical dashboards for administration
- **Revamped** UX and UI design with focus on intuitive, easy-to-use interfaces for educators and instructional designers.
- **Executed** streamlining lesson and strategy creation processes with AI technology
- **Optimized bundle size** and **performance** by using **SWC**
- Implemented **dynamic features** that adapt and evolve based on user feedback and educational trends.

Skills: Educational Technology · Large Language Models (LLM) · OpenAI GPT · python · Nodejs · React.js · Next.js

Full Stack Developer at Almanack – Remote - USA (09/2022 to Current)

Almanack.ai emerges as the pinnacle of **EdTech** innovation, revolutionizing educational landscapes with unparalleled AI-driven tools.

- Led the **initiative** for AI-generated, standards-aligned lesson plans, **transforming** teaching preparation approaches.
- **Orchestrated** the creation of an **AI-driven**, customizable **curriculum framework**, aligned with international educational standards. **Enhanced** learning outcomes and pedagogical **efficiency** through adaptable **design strategies**.
- **Developed immersive learning aids**, including **AI-based worksheets** and **presentations**, to boost student engagement and interactivity. **Advanced** the delivery of educational content with **dynamic** and user-friendly tools.
- **Initiated the development** of an innovative AI system for generating detailed, personalized report card comments.
- **Emphasized data privacy** in managing student information, complemented by **versatile export options** for educators. **Upgraded** user experience through **secure, intuitive, and responsive** design components..
- **Supplied educators with sophisticated tools** for **real-time tracking** and analysis of student performance.
- **Established a digital platform** that promotes **collaborative learning**, encouraging student interaction and **teamwork**. Crafted **virtual learning environments** to support collective education and idea sharing.

Skills: Full-Stack Development · Next.js · NestJS · Terraform · Amazon EKS · React.js · TypeScript · python · AWS Open Search, LLM RAG

Senior Backend Engineer at **Narohq** – Remote, USA **(09/2021 to Current)**

Innovated a dynamic document retrieval system on AWS, boosting sales manager performance by minimizing client response delays. This system proficiently ingested various media documents, extracting insights and utilizing an advanced vector search engine for storage and custom queries, while also automating email responses using OpenAI's GPT-4 and llm-based technologies.

- **System Development for Enhanced Performance**: Built a document retrieval system enhancing sales managers' efficiency, reducing client approach times.
- **Advanced Document Processing**: Engineered a system for diverse media documents, extracting insights for actionable intelligence.
- **Vector Search Engine Integration**: Implemented efficient document storage and retrieval with a powerful vector search engine.
- **Custom Query Automation**: Developed tailored document-based queries with automated email responses for streamlined communication.
- **Cutting-edge Technology Application:** Utilized AWS, Node.js, Python, and OpenAI's GPT-4 for scalable, intelligent solutions.
- **Scalable System Design**: Mastered building adaptable systems, advancing skills in complex technologies

Skills: AWS CloudFormation · Nodejs · aws textract · python · AWS Cloudsearch · JavaScript · AWS SQS · TypeScript · Amazon Relational Database Service (RDS) · AWS API Gateway · Amazon Web Services (AWS) · AWS Transcribe · OpenAI GPT · Software Development · Product Engineering · AWS SNS · AWS SAM · Marqo/Qdrant Search Engine · Git · AWS S3 · AWS Lambda · AWS Elastic Beanstalk · Serverless · llama indexing · AWS Dynamodb

Team Lead - Senior Software Engineer at **Remotebase** – Remote - USA **(06/2023 to 11/2023)**

Spearheaded the creation of an autonomous, fault-tolerant candidate hiring platform, integrating a suite of AWS services with advanced configuration management tools. This groundbreaking project significantly enhanced team training methodologies and operational efficiency through innovative cloud-based technologies.

- **Autonomous Sytem Architecture**: Led the development of a self-sufficient candidate hiring platform using AWS Lambda, DynamoDB, and AppSync.
- **Advanced Configuration Management**: Expertly managed system configurations with Terraform, CloudFormation, and Ansible for streamlined operations.
- **AWS Services Integration**: Incorporated various AWS services like Secrets, OIDC, oAuth2 protocols, and API Gateway for robust system functionality.
- **Team Training Optimization**: Revamped team training processes, focusing on technical skill enhancement in cloud management and automation.
- **Operational Efficiency**: Achieved higher operational performance by integrating cutting-edge AWS capabilities.

Skills: JavaScript · python · TypeScript · NestJS · AWS API Gateway · Docker · Git · AWS S3 · AWS CloudFormation · AWS Cloudsearch · AWS Dynamodb · AWS SAM · AWS SNS · AWS SQS · Continuous Integration and Continuous Delivery (CI/CD) · Back-End Web Development

Software Engineer at SWVL – Remote (08/2019 to 08/2021)

Project embarked on developing Bulk-Data API services, integrating AWS SQS for asynchronous messaging, and utilizing MongoDB for data storage. Deployed on GCP with Kubernetes, containerized via Docker and orchestrated with helm charts. Used Datadog for monitoring, and Jenkins Groovy with SonarQube in the CI pipeline for automation and code quality assurance.

- **API Service Development** Created Bulk-Data API services focusing on data management and system integration. Used AWS SQS for asynchronous messaging, enhancing system efficiency.
- **Data Storage**: MongoDB provided scalable, flexible storage solutions, ensuring robust data handling.
- **Cloud Deployment**: Kubernetes clusters were deployed on GCP, maximizing resilience and cloud resource optimization.
- **Containerization**: Docker facilitated lightweight, portable application packaging for efficient deployment.
- **Kubernetes Orchestration**: Helm charts managed advanced container deployment, streamlining Kubernetes operations.
- **Real-Time Monitoring**: Datadog was used for live system monitoring and performance analysis.
- **CI Pipeline**: Jenkins Groovy automated deployment workflows, revolutionizing the development process.
- **Code Quality**: SonarQube ensured continuous quality checks in CI, upholding high coding standards.

Skills: JavaScript · TypeScript · MongoDB · AWS Lambda · AWS API Gateway · AWS Cloudsearch · AWS SQS · Helm Charts · Kubernetes · Google Kubernetes Engine (GKE) · Docker · Jenkins · Git

Analyst Software Engineer at Afiniti – Remote (08/2019 to 08/2021)

Led a team to create advanced Call Management Systems using AWS services, enhancing performance and supporting multi-tier architectures.

- **Strategic Leadership**: Directed a skilled developer team to architect state-of-the-art Call Management Systems.
- **Performance Optimization**: Significantly outperformed legacy systems with advanced tech integration.
- **Resilient Architecture Design**: Engineered robust, scalable multi-tier architecture for varied use cases.
- **Advanced Real-Time Streaming**: Implemented scalable AWS Kinesis for efficient real-time data streaming.
- **Serverless Computing with AWS Lambda**: Utilized AWS Lambda for flexible, responsive serverless computing solutions.
- **DynamoDb for High-Volume Data**: Integrated DynamoDB for high-throughput, low-latency data storage.
- **Scalability and Durability Focus**: Prioritized system scalability and durability for high-impact performance.
- **Innovative Cloud Solutions**: Employed cutting-edge cloud services for dynamic system responsiveness and adaptability.

Skills: Amazon Connect · Standard Template Library (STL) · Test-Driven Development · CPP · CMake · PostgreSQL · Amazon Web Services (AWS)

Quantitative Software Engineer at **Cubist Systematics** – **Remote (09/2019 to 10/2021)**

Pioneered the customization of quantitative applications for financial trading, focusing on high-performance computing and large data stream management, with an emphasis on STL, multi-threading, and Agile methodologies for efficient, low-latency solutions.

- **Quantitative Application Customization**: Tailored applications for traders and portfolio managers, enhancing financial data processing and analysis.
- **High-Performance Framework Development**: Developed and tested object-oriented frameworks for maximum throughput and minimal latency, incorporating STL and advanced thread synchronization.
- **Agile Software Development**: Adopted Agile methodologies, ensuring close collaboration with clients and a focus on detailed requirements and design documents.
- **Latency and Statistical Testing**: Conducted extensive latency stress testing and statistical analysis, ensuring robust and efficient performance of quantitative frameworks.
- **Time Series Analysis Proficiency**: Applied time series analysis techniques for more accurate financial market predictions and data interpretation.
- **CPU Usage Optimization**: Focused on optimizing CPU usage for enhanced processing efficiency in financial applications.
- **Complex Event Processing** (**CEP**): Employed CEP programming paradigms to leverage multi-core CPU architectures, enhancing data processing speed and efficiency.

Core skills and competencies

Languages: • Python • JavaScript(ES6^) • C++

Development: • Nodejs • React/ Redux • Next.js • Nest.js • RESTful APIs • GraphQL
            • Cloud: AWS, Azure • TDD (Jest, Chai)

Operations & Tools: • CI/CD (Serverless, AWS Sam, Github actions, CloudFormation) • Docker/Compose
            • Agile/Scrum (JIRA) • NGINX
            • Git /GitHub (Pull requests & reviews) • Design (Figma) • npm / yarn

Soft Skills: • Communication • Leadership • Adaptability & Flexibility • Team Player

Education

Bachelor of Computer Science (07/2015 - 07/2019)
FAST NUCES - Lahore, Pakistan

Runner Up, App Dev Competition, SOFTEC, 2019