Emirhan Dere

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Overview

Experienced Software Engineer with over 10 years of expertise in designing, developing, and delivering high-quality, scalable solutions. Proficient in Golang and RUST, with a strong focus on developing robust applications and systems. Demonstrated expertise in blockchain technologies, including decentralized systems and smart contracts. Adept at building modern, responsive user interfaces with React and architecting cloud-based solutions on AWS. Proven track record of leading complex projects from inception to deployment, leveraging innovative technologies to solve real-world problems. Passionate about clean code, efficient workflows, and continuously advancing technical skills.

Skills & Abilities

Frontend Development:

-React.js, Next.js, TypeScript, JavaScript (ES6+), Redux, HTML5, CSS3, Tailwind CSS, Bootstrap, Responsive Design, Webpack, RESTful API integration

Backend Development:

-Golang (Gin, Echo), Python (Flask, FastAPI, Django), Node.js (basic), GraphQL, REST API design, Microservices architecture

Database & Storage:

-PostgreSQL, MySQL, MongoDB, Redis, SQLite

DevOps & Cloud:

-Docker, Kubernetes, AWS (EC2, S3, Lambda), Google Cloud Platform (GCP), CI/CD (GitHub Actions, Jenkins), Nginx

Additional Skills:

-Performance Optimization, API Integration, System Design, Code Review, Mentoring, Problem Solving, Technical Documentation

Education

Karadeniz Technical University

Master of Computer Science

Experience

Eduforma (Software Engineer)   Jul 2021 - present

- Built a **Slack bot** using Python to streamline processes and automate workflows within Slack channels.

- Integrated **AI** capabilities into the Slack bot, enhancing its decision-making abilities and enabling natural language processing.

- Designed and implemented three unique **simulation models** to effectively replicate and analyze complex real-world scenarios.

- Developed **smart contract** functionality using **Rust** and **Anchor** for the Solana blockchain, enabling secure, decentralized applications and seamless data transactions.

- Optimized performance and delivered intelligent data insights by leveraging a **Generative AI** engine.

- Employed AWS **Lambda** for serverless computing, boosting scalability while minimizing infrastructure overhead.

- Created interactive dynamic charts and tables with **React** and TypeScript to improve data visualization and user engagement.

- Developed **draggable** card components to enhance user interfaces, offering a more personalized and interactive experience.

- Utilized **WebSockets** for real-time communication, enabling instant updates between the server and client.

- Integrated **GraphQL** APIs to simplify data queries and streamline backend interactions.

- Deployed applications to cloud platforms (**AWS** and GCP) using services like EC2, S3, and Lambda to ensure reliability and scalability.

- Configured **GitHub hooks** to automate deployment, streamlining CI/CD pipelines.

- Collaborated with backend teams to integrate APIs and support **real-time** data delivery.

- Implemented **Redux** for efficient state management in complex React applications.

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- Enhanced performance with techniques like code splitting and lazy loading, **optimizing** user experience.

- Implemented server-side rendering (**SSR**) using Next.js, improving SEO and initial page load performance.

- Managed secure and efficient database solutions with AWS **RDS**.

- Wrote comprehensive unit and integration tests using **Jest** and **Cypress** to ensure application stability.

- Built high-performance backend systems in **Go**, leveraging Fargate for frontend delivery.

- Designed and deployed on-chain programs for Solana using **Rust**, incorporating Anchor framework for robust and developer-friendly smart contract implementation.

- Employed Behavior-Driven Development (**BDD**) using Cucumber, facilitating clear communication between developers and stakeholders.

- Automated acceptance tests with **Cucumber**, reducing manual testing by 50% and increasing project reliability.

Set up automated deployment pipelines with AWS **CodePipeline** and GitHub Actions, enabling continuous delivery.

- Worked with design teams to create responsive and accessible **UI** components.

- Used AWS **S3** for static file storage and CloudFront for fast content delivery, enhancing page load speeds.

Synlab (Fullstack developer)   Apr 2020 - Jul 2021

- Engineered high-performance applications using **Golang** and **Python**, prioritizing scalability and system resilience.

- Authored and maintained **Helm charts** to streamline the deployment of containerized applications across multiple environments.

- Automated CI/CD pipelines using **Jenkins**, significantly accelerating software release cycles and ensuring deployment consistency.

- Orchestrated **container** deployments to achieve high availability and optimized load distribution for critical services.

- Integrated **JFrog** Mission Control to manage artifacts effectively, enhancing software distribution workflows.

- Visualized and automated cloud-native deployments using **Spinnaker**, ensuring seamless transitions through all development stages.

- Enhanced infrastructure security by implementing Teleport, enabling secure access to sensitive company resources.

- Developed a Slack bot to improve team communication and productivity by automating routine interactions.

- Configured real-time alerting systems to notify teams about anomalies or potential issues, facilitating faster incident response.

- Created insightful dashboards using Grafana to visualize application metrics, system health, and user engagement data.

Automated the deployment of GraphQL services with TypeScript on AWS Lambda, while developing custom APIs to meet specific business needs.

- Collaborated with operations teams to fine-tune alert configurations, ensuring actionable and relevant notifications.

- Combined Grafana and Prometheus to implement a holistic monitoring solution, reducing system downtime and improving reliability.

- Designed scalable messaging systems using Google Cloud Pub/Sub, boosting real-time data stream processing performance by 30%.

- Optimized Google Cloud Datastore queries and data models, cutting latency by 20% for high-traffic applications.

- Simplified application deployment using AWS CDK, enabling efficient provisioning and management of AWS resources through reusable high-level constructs.

- Leveraged expertise in AWS CDK to define and deploy reusable cloud resources, improving team productivity and resource management across DevOps projects.

- Drove digital transformation initiatives, fostering continuous feedback loops to improve organizational processes and outcomes.

- Applied a diverse toolkit, including Helm, Jenkins, and Kubernetes, to champion DevOps best practices and cloud-native deployment strategies.

Younicos (Backend developer)   Jul 2017 - Apr 2020

- Participated in all phases of the SDLC, including requirement gathering, data modeling, analysis, architecture design, and project development.

- Created use cases, sequence diagrams, class diagrams, and state chart diagrams using UML notations and Rational Rose.

- Designed efficient solutions to address business requirements for e-learning platforms.

- Proposed and implemented data schema changes for a Python/Django application, addressing tech debt with minimal effort while improving product quality.

- Developed RESTful APIs in Golang to handle diverse system management tasks, including real-time chat, MySQL and MongoDB management, and integrations with Zoom, Vimeo, and Docusign APIs in a secure Linux environment.

- Built and deployed serverless applications in Golang on AWS Lambda.

- Set up a serverless environment with Node.js using Express.

Used Golang's CPU and memory profiling tools and containerized components using Docker and Kubernetes.

- Spearheaded the engineering effort to develop a React.js-based product, deployed on AWS Fargate.

- Implemented dynamic data visualizations with Highcharts.js, a rich text editor with Froala, real-time chat using Pusher, and notification systems via email and SMS. Improved SEO using various AWS services, including API creation for AWS Lambda functions.

- Resolved performance and functional bugs in the core product written in Golang.

- Designed and implemented a stage timeline feature in the Web UI client using JavaScript and React. Enhanced CLI functionality with stage deletion implemented in Golang. Leveraged Golang to interact with Docker CLI tools.

- Managed logistics operations by optimizing delivery routes and schedules for shipping carriers and truck fleets, reducing operational costs and improving efficiency.

- Integrated Go microservices into a frontend project originally based on Python Rest APIs, adding features such as impersonation.

- Developed backend connections using gRPC and tested APIs with Ginkgo and GoMega frameworks.

- Created a Golang microservice to efficiently read and process large datasets from a PostgreSQL database.

- Installed, monitored, and maintained PostgreSQL and MySQL databases, implementing monitoring systems, alerting mechanisms, backup and recovery processes, and performance tuning for both systems and SQL queries.

- Developed microservices for data synchronization and automation between two database services.

- Defined microservice prototypes, organized project structure, and implemented middleware layers for scalability.

- Built expertise in high-volume environments, leveraging Kafka Connect and schema registry for data processing and integration.

- Provided on-call support and production administration for MongoDB and SQL on Hadoop systems.

- Integrated Jenkins with Git to enable automated builds triggered by code pushes, streamlining CI/CD pipelines.

Spread group (Frontend developer)   Jan 2013 - Jun 2017

- Followed Agile methodology with two-week sprints and daily SCRUM meetings to streamline the development process throughout the project lifecycle.

- Played a key role in gathering client requirements and creating solution demonstrations to meet business needs.

- Migrated an existing Python/Django application to a Golang-based gRPC architecture, improving system efficiency and scalability.

- Developed new RESTful API services in Golang to serve as middleware, enabling seamless interaction between the application and third-party APIs.

- Built a Golang microservice to process large datasets (millions of records) efficiently from a PostgreSQL database.

- Designed and implemented database models, APIs, and views using Python, creating an interactive web-based solution.

- Created RPC-based services in Golang for handling extensive data processing tasks from PostgreSQL databases.

- Automated CI/CD pipelines by integrating Jenkins with Git, triggering builds automatically on pull requests.

- Experienced in using Golang on UNIX and Linux platforms, with a strong understanding of design patterns, multithreading, and Golang containers.

- Optimized performance using Golang channels and goroutines, enhancing multi-threaded operations.

- Containerized applications with Docker, creating Dockerfiles and building images for microservices to deploy on Kubernetes platforms.

- Managed and monitored scalable infrastructure on AWS, leveraging AWS CLI and SHELL/Bash scripting for resource management.

- Developed OpenStack APIs to integrate with Amazon EC2, including the creation of machine images for cloud-based deployments.

- Designed configurable REST APIs using Golang frameworks like Gin, Revel, and Beego.

- Utilized Golang's JSON package for marshalling and unmarshalling data.

- Created responsive web designs (RWD) with AngularJS, manipulating data to meet company standards in the UI.

- Used jQuery for AJAX calls, enhancing interactivity by handling JSON responses effectively.

- Proficient in working with databases such as MongoDB, Cassandra, and MySQL.

- Leveraged Golang to log host system events and alerts into a SQL Server database.

- Managed containerized applications with Kubernetes for orchestration and scaling.

- Used XML to standardize data, simplify platform transitions, and ensure availability across distributed systems.

- Secured DynamoDB resources with AWS IAM, implementing least privilege principles to enhance security.

- Utilized AWS Lambda and API Gateway to integrate with DynamoDB, enabling real-time data processing and improving application responsiveness.

- Worked with Hibernate to map Java objects to relational databases and execute SQL operations for data management.

- Created and tested RESTful Web Services using tools like Postman and Swagger UI to interact with third-party applications.

- Collaborated with business users and stakeholders to gather and analyze requirements, translating them into User Stories in JIRA.