KYLE BROOKS

Hickory, NC 864-360-5512 Website

SUMMARY

Highly effective software developer with a decade of real world experience working full-stack with enterprise-level cloud solutions. A valuable team player and an effective communicator. Eager to learn new technologies and pursue best practices in all areas of the software development process.

TECHNICAL SKILLS

- Languages: Typescript | Javascript | Python
- Frameworks: Node | Next.js | Serverless | Angular | FastAPI
- DevOps: Github Actions | Gitlab CI | Terraform | Docker
- Databases: PostgreSQL | DynamoDB | MongoDB
- Cloud:
  - AWS: Lambda | SQS | S3 | Step Functions | Route53 | DAX | Kinesis | API Gateway | EventBridge | CloudWatch
  - Azure

EXPERIENCE

SENIOR SOFTWARE ENGINEER, DUKE ENERGY; REMOTE – MAR 2025 - PRESENT

- Built out API to facilitate data aggregation between multiple disparate systems, supporting both automatic pipeline jobs as well as manual processes
- Implemented UI dashboard to allow SMEs to view/filter/edit aggregated data and resolve discrepancies between various systems of record
- Designed and implemented both UI and backend for a “self-service” permission system that allows admins to create their own custom groups, assign users, and define fine-grain permissions for viewing/editing data
- Refactored multi-step validation flow to use event driven processing over polling, eliminating timeouts and improving user experience
- Employ Copilot to plan new features, refactors, and build out robust test coverage

SENIOR SOFTWARE ENGINEER, ALLY; REMOTE – APR 2021 - JAN 2025

- Completely redesigned and implemented the flow that handles triggering over 1.2 million customer notifications daily to improve performance and reduce third party dependencies
- Decreased notification delivery time by leveraging DAX to fetch configuration data and using SQS to offload record-keeping to an async process
- Increased notification tracking by standardizing and increasing status records stored in DynamoDB
- Improved reliability by implementing a multi region active/active routing strategy with AWS Route53 to eliminate down time during region outages

- Developed and deployed Node.js/TypeScript Lambda functions to support various microservices, replacing legacy Java-based lambdas to improve performance and maintainability
- Designed and implemented a notification replay strategy using global DynamoDB tables and DDB stream events to mitigate dropped notifications during AWS region outages
- Provisioned SQS queues in front of lambdas to allow batch processing of requests and reduce lambda throttling
- Led the transition from a monorepo structure to multi-repo to massively reduce unnecessary resource creation in dev environments
- Reduced pipeline build time by 83% (30 minutes to 5 minutes) and package size by 97% (~40MB to ~1MB) through restructure of lambda service building using Serverless
- Leveraged Terraform in CI/CD pipelines to automate the deployment of all AWS services used in our platform
- Continuously iterated Gitlab CI/CD pipelines to reduce overall build times
- Participated in voluntary Security Champions team to stay on top of emerging vulnerabilities

FULL STACK ENGINEER, PAYMENTUS; REMOTE – SEP 2019 - APR 2021

- Developed and delivered a robust, highly customizable MERN payment solution from the ground up within a year
- Created and documented reporting solutions that utilize dynamic MongoDB queries
- Developed reusable React components that could be utilized across repos
- Efficiently networked with multiple teams to best leverage resources and share knowledge
- Detailed code review sessions with experienced developers to ensure best practices and increase programming knowledge
- Groomed incomplete customer requirements into detailed, manageable development stories

STAFF SOFTWARE DEVELOPER, SCI FUSION360; CLT, NC MAY 2016 - AUG 2019

- Provided crucial, full stack development to support IBM's Financial Transaction Manager (FTM) product
- Implemented patches and bug fixes across multiple Java services within FTM
- Effectively communicated to develop solutions based on shifting customer needs within tight deadlines
- Utilized version control to actively support multiple customers at different release levels
- Week long on-call once a month as first point of contact for show-stopping bugs or issues found in live customer environments

EDUCATION

COLLEGE OF CHARLESTON, CHARLESTON, SC – B.S. IN COMPUTER SCIENCE, 2016