

# Abhishek Mathews

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## SENIOR SOFTWARE ENGINEER

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Senior Software Engineer with 7+ years of experience leading the design and delivery of high-impact systems, including a just-in-time AWS access feature that cut issue resolution time by 50% and reduced user complaints by 20%. Drove cross-functional initiatives to enhance application functionality and owned the modernization of database deployment workflows, eliminating 50% of manual effort. Over two years, spearheaded compliance and cloud cost-optimization efforts by implementing Cloud Custodian policies and architecting an automated off-hours database management solution, generating substantial cost savings for a large financial organization.

## WORK EXPERIENCE

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### BlackBoiler (Contract)

Jun 2025 - Sep 2025

*Software Engineer (Part-Time)*

*Remote, VA*

- Designed an updated data schema (in Mongoose for MongoDB) for the "settings" page of the application which would be tailored to each individual customer
- Wrote MongoDB model to match updated schema which would deploy the related MongoDB database on application update

### Capital One

Sep 2022 - Apr 2025

*Senior Software Engineer*

*McLean, VA*

- Led architecting and implementation of high-risk issue resolution by creating just-in-time AWS access feature, resulting in fifty percent faster issue resolution time
- Collaborated with team to improve app functionality, leading redesign of Auth and data access and achieving 20% decrease in user complaints
- Implemented compliant database deployments by integrating with internal CI/CD tooling, reducing manual work by 50% and increasing data security
- Released controlled deployment acceleration feature which runs on thousands of developer pipelines to save hundreds of hours and decreasing deployment time by 40%
- Overhauled user entitlement access in an internal CLI tooling in order to improve data retrieval/filtering around AWS IAM entitlements, especially for users with thousands of results

### Extend

Jul 2021 - Jul 2022

*Senior Software Engineer*

*USA*

Led a team of engineers to build and iterate upon an external customer experience portal. Focused on a tech stack including Typescript, React/Redux, AWS Lambda and API Gateway

- Designed and released a customer-facing portal for purchased warranty experience, improving user engagement and satisfaction
- Collaborated with the security team to design and build an authentication flow, enhancing system security and user access control
- Mentored new engineers on technology stack, architecture, and deployment patterns, accelerating their integration and productivity within the team

### Capital One

Mar 2019 - Jul 2021

*Software Engineer*

*McLean, VA, USA*

- Led refactor and implementation of EC2/ECS off-hours solution that optimized cost for AWS resources across thousands of non-production accounts
- Implemented Cloud Custodian policies and visual emails, improving compliance and reducing costs by streamlining resource management
- Architected an Off-Hours solution for database management, achieving significant cloud cost-savings and improving resource allocation
- Designed and implemented a proof-of-concept solution to assist developers in producing IAM policies that used least-privilege principles based on their applications usage in non-production environments

### Cloudreach

Jun 2018 - Mar 2019

*Cloud Systems Developer*

*Reston, VA, USA*

- Executed cloud infrastructure standups for a large financial organization, improving team collaboration and project alignment using Agile methodologies
- Supported front door tickets and requests to build out one-off resources, enhancing resource allocation efficiency by utilizing problem-solving skills and Java

### Ellucian

Aug 2017 - Jun 2018

*Junior DevOps Engineer*

*Reston, VA*

- Participated in an on-call rotation to manage enterprise CI/CD pipeline for application deployment
- Developed and managed playbooks for creating deployment images with image hardening principles in mind
- Managed the company-wide AWS accounts and the respective resources using scripts and Cloud Custodian policies

## EDUCATION

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**Georgia Institute Of Technology**

**Aug 2017 - Aug 2022**

*Ms, Computer Science*

- **GPA:** 3.71

**George Mason University**

**Aug 2013 - May 2017**

*BS, Computer Science*

- **GPA:** 3.54

## SKILLS

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- **Hard Skills:** Amazon Web Services, Api Design, API Gateway, Application Programming Interface, Build Tools, Cloud Computing, Coding, Continuous integration, Cost Reduction, Data Access, Data Modeling, Debugging, Docker, Git, GraphQL, Java, Jenkins, NoSQL, Python, Redux, REST APIs, Root Cause Analysis, Software Design, Software Development, Software Engineering, Terraform, Testing, TypeScript, Version Control, Web Applications
- **Soft Skills:** Agile, Efficiency, Leadership, Mentoring, Problem Solving, Results Focused, Team Player