

# PAVEL MUSATOV

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## PROFESSIONAL EXPERIENCE

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**Amazon - QuickSight Embedding**, New York, NY May 2024 – Present  
**Software Development Engineer**

- Designed tag-based row-level security features for AWS QuickSight registered users, allowing customers to secure data displayed on their embedded dashboards at runtime.
- Developed a frontend design-language system (DLS) for QuickSight's data sources, streamlining the process and reducing engineering effort for onboarding new SaaS data source connectors by >250%.
- Revamped internal frontend integration testing tools to boost efficiency and ensure seamless compatibility with new AWS regions, enabling automated regression tests in previously unsupported regions.
- Optimized internal automated frontend test suites to achieve a pass rate exceeding 95%, saving on-call engineers >15 hours per week on manual regression validation.
- Contributed over 250K lines of code across 77 packages, ranking in the top 10% of code contributors within the team and driving impactful improvements across QuickSight's codebase.

**Amazon - QuickSight Data Prep**, New York, NY Jun 2022 – May 2024  
**Software Development Engineer**

- Led migration of QuickSight's data preparation micro-frontend to a dedicated pipeline, refactoring 15,000+ lines of code across React components, Flux stores, and unit tests, reducing deployment time by >400%.
- Designed and deployed a unique key column selection feature for SQL query optimization in large datasets, accelerating dashboard data load times by up to 10X for enterprise customers.
- Engineered a session tag-based row-level security enhancement, enabling dynamic combinations of RLS rules with OR logic, significantly improving flexibility for users viewing embedded visuals and dashboards.
- Built and maintained the VPC Connection management frontend in React, Redux-Saga, and TypeScript, mentoring 2 cross-team engineers with limited frontend experience to achieve project scalability.

**Accelerated Information Systems**, Long Island, NY Aug 2020 – June 2022  
**Cloud Developer**

- Delivered automation solutions for government and education clients, integrating APIs (DocuSign, Salesforce, and proprietary systems) to modernize document workflows and improve client retention.
- Designed and implemented a Node.js-powered custom widget to integrate DocuSign, leveraging OCR technology to achieve 100% accuracy in automated form field recognition and parsing.
- Automated the student intake and document submission workflows for Lincoln Tech, creating real-time document tracking portals and SMS/email reminders to streamline student compliance.
- Constructed government payment processing portals using lesser-known vendor APIs, enabling secure credit card transactions alongside form digitization and approval workflows.
- Mentored 5 software engineering interns through code reviews, task assignments, and project guidance, fostering technical growth and contributing to the team's delivery of high-impact projects.

## TECHNICAL SKILLS

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**Languages:** JavaScript, TypeScript, C++, C#, Java, Python, HTML/CSS, SQL

**Frameworks:** React, SASS, Redux-Saga, Webpack, NodeJS, MySQL, NoSQL, Java Spring, Spring Boot

**Cloud/AWS:** Lambda, CloudWatch, CloudFormation, CloudFront, IAM, S3, DynamoDB, MongoDB, CDK, VPC

**Core Competencies:** Full-Stack Development, SDLC, Agile, Mentorship, Technical Writing, Multi-lingual

## EDUCATION

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**College of Staten Island**, Staten Island, NY

Bachelor of Science, Computer Science