

Location

Toronto, ON, Canada

Alex Díaz

Github

<https://github.com/akdev11>

Mail

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Programming Languages

- Java
- C
- C++
- Python
- Typescript

Experience

December 2023 - Present | **Sr. Systems Development Engineer - L6**

Amazon

- Developed and owns a proactive shipment issue detection system, unblocking 10M shipments/week and saving \$100M annually
- Spearheading critical migration efforts to meet the expected deadlines and avoiding costly delays due to infrastructure costs.
- Owns and maintains warehouse-facing tools processing thousands of requests from Amazon Warehouses globally.
- Provides high severity support for critical services, documenting and preparing communications to senior leadership.
- Performs technical deep dives to root cause and reproduce complex production issues.
- Finds new opportunities to deploy AI solutions to increase developer productivity.

April 2023 - November 2023 | **Systems Development Engineer - L5**

Amazon

Projects

- Proactive Shipment Detection System:
Mitigated issues with customer shipments, preventing potential disruptions before impacting customers.
- Inventory Adjustment System:
Automated large-scale inventory adjustments, improving accuracy and efficiency in responding to safety-critical events.
- Runtime Instrumentation for Java Applications:
Enhanced infrastructure visibility, enabling better decision-making during critical region migrations.

- Designed and built a safe inventory deletion system for emergencies in Amazon Warehouses saving 4000 hours of labour every year summing up to \$5M/yr.
- Led architecture design and execution, mentoring junior engineers through implementation and delivery of a platform processing 5k requests/week.
- Took the lead on technical decisions across the team's projects due to experience and highly technical background.
- Participated in code review process and deliver feedback effectively to increase team productivity.
- Implemented technically involved parts of ongoing projects (authentication, database access, performance-related functionality).

January 2023 - April 2023 | **DevOps Engineer - L5**

Amazon

- Created Web-based tool for recovery during emergencies. It automated a clunky and error-prone manual process which resulted in savings of 1500 engineer hours per year. (AWS API Gateway, AWS Lambda, DynamoDB, SQS)
- Designed the architecture of the back-end application on AWS Lambda to lower ongoing maintenance costs. (Java, Dagger, AWS Lambda, Smithy)
- Designed and implemented the front-end website using React, Redux and TypeScript following best practices to achieve optimal performance and responsiveness in mobile and under poor connectivity. (TypeScript, React, Redux, API Gateway, AWS Lambda)
- Designed data processing platform to analyze and detect stuck shipments within the Amazon Fulfillment Network. Expected to save over 4000 hours of engineer time per year. (AWS Glue, Athena, ECS)

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June 2020 - December 2022 | **DevOps Engineer - L4**

[Amazon](#)

Github

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- Support multiple teams on high severity and low severity incidents, decreasing resolution time.
- Developed a pipeline scanning tool to analyze full CD/CI best practices on over 1,000 pipelines.
- Supported the use of the pipeline scanning tool leading the improvement of the FullCD posture of 30 pipelines.
- Improved an internal tool for automatic dashboard generation to show configured alert thresholds.

Human Languages

- Spanish (Native)
- English (Fluent, C2)

Open Source Contributions

- neovim: Enabled building of statically linked binaries.
- Universal Blue: Developed proof of concept containerizing the nvidia drivers into an OSTree-compatible OCI image.

Cloud Services

AWS CDK

CloudFormation

Elastic Container Service

May 2017 - May 2020 | **Systems Engineer**

[Fundserv](#)

- Implemented a fully-automated pipeline to provision VMs on VMware ESXi using Jenkins and Ansible.
- Developed customized ansible inventory plugin to get inventory information via the vSphere Automation SDK.
- Developed a three-tiered Angular/Springboot Java application for accounting.
- Developed a new service management facility built on ksh88.

Education

2021 | **AWS Cloud Practitioner**

[Amazon Web Services](#)

Obtained the Cloud Practitioner certification as an opening in the AWS Skill Tree.

2019 | **Red Hat Certified Systems Administrator**

[Red Hat](#)

Obtained the RHCSA certification after attending Red Hat training sessions.

2019 | **Red Hat Certified Ansible Specialist**

[Red Hat](#)

Self-taught Ansible and was able to obtain the specialist-level certification on it.

2018 | **Computer Programming Diploma**

[Seneca College](#)

Strong focus on hands-on experience with industry standard technologies.

AI/LLM

AWS Bedrock

AWS Strands

MCP SDK

Amazon Q CLI

Frameworks

Spring

React