alexkates.dev

#### **PROFILE**

Full-stack software developer, <u>AWS Certified Solutions Architect</u>, and <u>AWS Community Builder</u> with 15+ years of professional development experience building scalable solutions in the financial services space including market data management, collateral management, and small business lending utilizing software development practices including continuous delivery, evolutionary design, test-driven development, and pair programming.

#### **EXPERIENCE**

## **Director of Engineering, Croissant**

Croissant - Remote *Jun 2022 - Present* 

<u>Croissant</u> offers shoppers Guaranteed Buybacks on the things they purchase by providing a suite of shopping tools across Chrome, Safari on IOS, and Shopify API integrations

- Design and implement the Croissant platform in AWS leveraging serverless technologies including AWS AppSync, Lambda, API Gateway, Event Bridge, DynamoDB and S3
- Implement the Croissant product suite including the <u>Chrome extension</u>, <u>IOS app</u>, <u>app.croissant.com</u>, and <u>croissant.com</u> using Next.js, React Native + Expo, React, Vite, and others
- Recruited, hired, and mentored a development team of 6 in React and AWS best practices, infrastructure as code, test-driven development, and continuous delivery

#### **Lead Backend Engineer, Credit Genie**

CreditGenie - Conshohocken, PA *Dec 2019 - Mar 2022* 

Credit Genie empowers consumers to get out of credit card debt by utilizing technology to monitor their income, expenses, and debts to negotiate "right-sized" credit card payments directly with their lenders.

- Design and implement the Credit Genie platform in AWS leveraging serverless technologies including AWS AppSync, Lambda, API Gateway, DynamoDB and S3
- Design and implement Credit Genie APIs including Decision and Offer services using NodeJS and Express
- Advocate and mentor product development teams in AWS best practices, infrastructure as code, test-driven development, and continuous delivery

## Platform Engineer, PayPal Business Lending PaaS

PayPal - Conshohocken, PA Sep 2017 - Dec 2019

PPBL Secure Zones is a Platform as a Service built-in AWS that enables PayPal Credit business units to perform continuous delivery while conforming to PayPal information and operation policies

- Design and implement secure and highly available AWS infrastructure including network, compute, storage, identity, and security concerns using AWS CLI and CloudFormation
- Design and implement continuous delivery pipelines using Docker, Octopus Deploy, and TeamCity
- Design and implement a scalable data encryption solution using AWS IAM, KMS, and CloudHSM Custom Key Store

 Advocate and mentor product development teams in infrastructure as code, test-driven development, and continuous delivery

### Senior Software Engineer, LoanBuilder

Swift Capital - Conshohocken, PA Mar 2016 - Sep 2017

<u>Loanbuilder.com</u> enables small business owners to obtain working capital by customizing the terms of a loan agreement.

- Develop a web application using AngularJS enabling small business owners to obtain and repay business loans
- Develop a REST API using Asp.net WebApi that enables developers to build web and mobile client applications that interface with the LoanBuilder data model
- Mentor developers using test-driven development, pair-programming, and SOLID design principles

## Senior Software Engineer, Risk Platform

Investorforce, MSCI- Conshohocken, PA *Mar 2014 - Mar 2016* 

InvestorForce Risk Platform enables investment consultants to perform predictive risk calculations on investment portfolios.

- Develop a web application using AngularJS that enables Asset Managers to create risk reports that include historical and predictive stress tests, value at risk, and active risk
- Develop a REST API using Asp.net WebApi that enables developers to build custom client applications that interface with the risk platform
- Mentor junior and mid-level developers in test-driven development, continuous integration, code-first entity framework, WebAPI, NUnit, Selenium, and RhinoMocks

#### **Senior Software Engineer, Collateral Operations**

Algorithmics, An IBM Company - Philadelphia, PA Nov 2011 - Mar 2014

Collateral Operations offers banks, insurance providers, pension funds, and asset managers an automated enterprise-wide margining solution for all aspects of the collateral management process.

- Develop a Windows desktop application using C# and Winforms that enables trading and investment firms to calculate margin calls and interest on their collateral positions
- Develop an API using C# and WCF that enables developers to create custom client applications to consume margin call, interest, and collateral position data.
- Develop a command-line utility to manage the migration and archive of historical margin call, interest, and collateral position data

#### Software Developer, Master Data Management

Susquehanna International Group - Bala Cynwyd, PA Jan 2010 - Nov 2011

The Master Data Management team provides services that enable traders to access market data

- Develop a web application using C# and ASP.net that enables traders to consume equity, fixed income, future, and options market data.
- Develop a REST API using C# and ASP.net WebAPI that enables internal development teams to consume market and trading-related data.

### **EDUCATION**

# **Computer Science, Bachelor of Science**

Drexel University, Philadelphia, Pennsylvania **Awards:** Drexel Academic Scholarship and Grant

Jan 2008 - Sep 2010

**Coursework:** Software Engineering Workshop, Software Design, and Engineering, Concurrent Programming, Operating Systems, Programming Language Concepts, Graphical User Interfaces,

Database Systems, Human-Computer Interaction, Computer Graphics, Differential, Integral and Multivariate Calculus, Kinematic, Electromagnetic, and Relativity Physics, Linear Algebra, Discrete Mathematics

## **General Education, Associate of Science**

Delaware County Community College, Media, Pennsylvania

Achievements: Graduated with Honor Sep 2005 - Dec 2007

Coursework: Introductory Mathematics, Computer Science, Physics, General Education