Duncan McIsaac

Product engineer.
Trying to add more stability to people's lives.

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Experience

Senior Software Engineer
Kiva.org // July 2019 to Present
Engineering lead for auto-lending and subscription products
 - Built highly configurable and performant system to automatically make loan share purchases on behalf of consenting lenders
 - Participated in fire team to conceive of and launch COVID-19 pre-fund product in 4 weeks
 - Manage new feature development for Kiva's Monthly Good product and auto-lending customization

Senior Software Engineer
Capital One Financial Corporation // January 2018 to July 2019
For a Scala-based core banking platform deployed on AWS:
 - Led API design
 - Wrote technical white paper with target audience of Sr. Manager to SVP/MVP; received high degree of praise across entire range
 - Led documentation efforts of 20+ member team
 - Collaborated with leadership team to set goals and priorities; groomed epics/stories and set direction for various work streams
 - Led design and development of financial product test harness

Software Engineer
Capital One Financial Corporation // July 2016 to December 2017
 - Designed domain specific language to model financial products; conducted user studies with engineers to evaluate its intuitiveness
 - Developed API with Spring that enables automatic debit card reissue

Projects

Nonvisual Interaction Techniques at the Keyboard Surface
Web Accessibility Research // Accepted to CHI 2018
 - Second author on paper describing novel interaction techniques for web navigation involving spatially-consistent mapping of web content to keyboard
 - Developed tools and software to facilitate visual-to-haptic translation of website layouts for visually impaired users
   doi 10.1145/3173574.3173585

Education

Carnegie Mellon University
Class of 2016
B.S. Information Systems
Minor in Human-Computer Interaction

Languages

Scala
PHP
ES6
Python
Java
CSS / SASS

Technical Skills

Functional Programming
Distributed Systems
CI / CD
Relational Databases
Docker
Kafka

Other Skills

Technical Writing
User Experience Design
Product Management
Data Visualization
Web Accessibility
Sketch

Certifications

AWS Certified Developer - Associate