

Duncan McIsaac

Software engineer focused on delivering value to customers by improving the holistic product experience.

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Experience

Senior Software Engineer

Capital One Financial Corporation // January 2018 to Present

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
- Developed high-fidelity mobile prototype of new online account opening flow

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

UI Engineering for Google Lunar XPRIZE Team

Advanced Mobile Robot Development // January 2015 to May 2015

- Developed mobile lunar rover control application for demonstration at World Economic Forum in Davos, Switzerland
- Contributed to design and development of rover mission control dashboards

Education

Carnegie Mellon University

Class of 2016

B.S. Information Systems

Minor in Human-Computer Interaction

Languages

Scala
ES6
Python
Java
CSS / SASS

Technical Skills

Functional Programming
Distributed Systems
CI / CD
Relational Databases
Docker
Kafka
Some Node.js / React

Other Skills

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

Certifications

AWS Certified Developer - Associate