SAMUEL CABRAL CRUZ

Candidate to the Engineering Profession (CEP), B. Eng. Software Engineering, B. Sc. Actuarial Science

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EXPERIENCE

Software Developer
Ingeno

June 2018 – Present   Quebec, CA

- Contribute to various **development projects**:
  – Web platform for condos building management
  – Expose an AI model for the surgeries scheduling optimization
  – Refactor the core domain of an advertising placement optimization company
- Produce **technical audits**
- Manage **client interactions**
- Create and maintain **templates** to simplify **project boilerplating**
- **Supervise students** in their bachelor project
- Participate to **recruiting process**

Course Assistant - GLO-4002 Software Quality and Metrics
Laval University

May 2019 – Present   Quebec, CA

- Original Contributor of **RaftmanCG**
- Correct **semester projects**
- Correct **exams**
- Produce **educational content**
- **Answer students' questions**

Software Developer
DashThis

May 2019 – May 2020   Quebec, CA

- **Maintain** a **dashboard creation platform** to track performance of **online advertising campaigns**
- Participate to **product design workshops**
- **Ensure quality of weekly releases** (Manual Testing)
- Instrument the application to **analyze users' behavior**
- Manage the integration of **different code base versions inside the same monolith**
- **Refactor legacy code when needed**

EDUCATION

Laval University
Bachelor's Degree in Software Engineering

Jan. 2017 – May 2020   Quebec, CA
- **Minors:** International and Distinction
- **GPA:** 4.22/4.33

Norwegian University of Science and Technology (NTNU)
Master's Degree in Computer Science

Jan. 2018 – June 2018   Trondheim, NO
- Student exchange program

Laval University
Bachelor's Degree in Actuarial Science

Sept. 2012 – May 2015   Quebec, CA
- **GPA:** 3.96/4.33

PROJECTS

Unversolved Review Threads | | 2021
```
/**
 * GitHub Action to block pull requests with
 * unresolved review threads
 */
tags = ["GitHub Actions", "Typescript", "Jest",
"Pull Requests", "Code Reviews"]
```

Sensei | | 2020
```
/**
 * University projects correction tool
 * Features:
 * – Static report generation for student
 * consultation
 * – Multi-language/paradigm support
 * – Code Highlighting
 * – Preset Comments
 */
tags = ["JetBrains Plugin", "Kotlin", "IDE",
"HTLM5", "CSS3", "Code Reviews", "Educational"]
```

RaftmanCG | 2019
```
/**
 * University Projects Delivery Platform
 * Features:
 * – Project Statements Publication
 * – Delivery Management
 * – Feedback on Delivery
 * – Correction Automation
 * – Team Management
```

Course Assistant - GLO-2003
Introduction to Software Engineering Processes

Laval University

📅 Jan. 2020 – May 2020   📍 Quebec, CA

- **Prepare lab sessions**
- **Animate lab sessions**
- Prepare and correct **weekly quizzes**
- Correct **semester projects**
- Write **Karate/Cucumber tests suites**
- **Answer students' questions**

Software Developer - Intern

XpertSea

📅 Jan. 2019 – May 2019   📍 Quebec, CA

- **Refactor business' administration platform**
- Occasionally modify the **Python backend**
- Migrate **functionalities** from ember.js application to **Polymer** (Web Components + Shadow DOM)

Database Analyst
Research and Development

Desjardins General Insurance Group (DGIG)

📅 May 2017 – Dec. 2017   📍 Quebec, CA

- **Bulk extraction** from indemnization agent notes using **NLP approaches**
- Redesign the **data extraction pipeline** used to create fraud models
- Create a SAS scripts documentation generator using `XSD`, `XML` and `XSL`

Actuarial Analyst
Property Ratemaking

Desjardins General Insurance Group (DGIG)

📅 May 2013 – Dec 2016   📍 Quebec, CA

- Create a **conversion solution's KPIs monitoring dashboard** (`EXCEL/VBA`)
- Establish 2017 **Budget's assumptions**
- Contribute to the integration of State Farm's Canadian book of business
- **Write different scripts** to identify, extract, produce and validate the information contained in the pricing system
- Review various **segmentation and pricing models**

```
 * - Deliveries Archive
 * - Reviews/Results Publication
 */
tags = ["Ruby on Rails", "Active Record", "RSpec", "minitest", "Rake", "Docker", "Digital Ocean"]
```

Bombhunt | ○   2018
```
/**
 * University Project (TDT-4240)
 * Remake of the famous Bomberman game
 */
tags = ["Java", "Android", "LibGDX", "ECS"]
```

Web Security Lab | ○   2018
```
/**
 * University Project (TTM-4135)
 * Securing unprotected PHP application
 */
tags = ["PHP", "Apache", "2FA", "PWD Storage", "TLS", "Recognized Devices", "Email Alerts"]
```

R Markdown Template | ○   2018
```
/**
 * R Markdown Scientific Paper Redaction
 */
tags = ["R Markdown", "LaTeX", "BibTeX", "CSL"]
```

Jukebox | ○   2017
```
/**
 * University Project (GLO-2004)
 * Learn to play music using digital instruments
 */
tags = ["Java", "Swing", "MIDI", "UP"]
```

RaQ 2017 | ○ | 🌐   2017
```
/**
 * R Introduction Workshop using OpenFlight
 * (RaQ 2017)
 */
tags = ["R", "Leaflet", "SIG", "Stats"]
```

Assignment Template | ○   2017
```
/**
 * University Assignments LaTeX Template
 */
tags = ["LaTeX", "GLO", "ULAVAL", "NTNU"]
```

ACHIEVEMENTS

Certifications
AWS Certified Cloud Practitioner   2021

Scholarships
Desjardins Excellence Scholarship   2018
Laval University Admission Scholarship   2011

Competitions
Truncated Claim Amounts Extrapolation
1st Place - Desjardins General Insurances Group   2015
Asset-Liability Matching Optimization
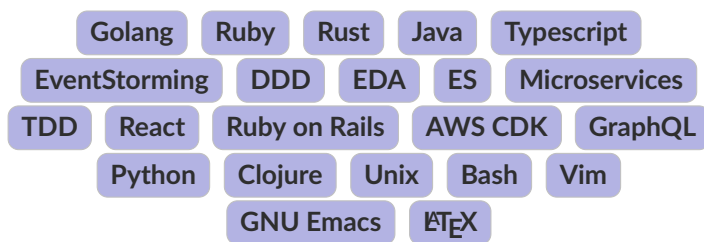1st Place - SSQ Financial Group   2015

PUBLICATIONS

Cabral Cruz, S., *GitHub Actions Workflow Reusability*, 3 2021, `https://samuelcabralcruz.medium.com/github-actions-workflow-reusability-965a5c26df1d`.

Cabral Cruz, S., *Migrating from CircleCI to GitHub Actions*, 3 2021, `https://samuelcabralcruz.medium.com/migrating-from-circleci-to-github-actions-eb92fcce3e10`.

Cabral Cruz, S., *Unresolved Review Threads*, 3 2021, `https://samuelcabralcruz.medium.com/unresolved-review-threads-5c53a200e8eb`.

Cabral Cruz, S., *Analyse de marché du transport aérien canadien avec R*, 5 2017, `https://github.com/vigou3/raquebec-atelier-introduction-r/blob/master/caseStudy/statement/LaTeX/OpenFlightsCaseStudy.pdf`.

TECHNICAL SKILLS

Golang   Ruby   Rust   Java   Typescript
EventStorming   DDD   EDA   ES   Microservices
TDD   React   Ruby on Rails   AWS CDK   GraphQL
Python   Clojure   Unix   Bash   Vim
GNU Emacs   LaTeX

STRENGTHS

- Autodidact
- Business Awareness
- Disciplined
- Negociation
- Organization
- Fast Learner
- Persuasive
- Problem Solving
- Tenacious
- Hard-Working

READINGS

Martin, R., Clean architecture : a craftsman's guide to software structure and design, Prentice Hall, London, England, 2018.

Wlaschin, S., Domain modeling made functional : tackle software complexity with domain-driven design and F, Pragmatic Bookshelf, Raleigh, North Carolina, 2018.

Brandolini, A., *Introducing EventStorming*, 9 2015.

Newman, S., Building microservices : designing fine-grained systems, O'Reilly Media, Sebastopol, CA, 2015.

Whittaker, J., How Google tests software, Addison-Wesley, Upper Saddle River, NJ, 2012.

Vernon, V., Implementing domain-driven design, Addison-Wesley Professional, Place of publication not identified, 2012.

Martin, R., The clean coder : a code of conduct for professional programmers, Prentice Hall, Upper Saddle River, NJ, 2011.

Freeman, S., Growing object-oriented software, guided by tests, Addison Wesley, Upper Saddle River, NJ, 2010.

Martin, R., Clean code : a handbook of agile software craftsmanship, Prentice Hall, Upper Saddle River, NJ, 2009.

Evans, E., Domain-driven design : tackling complexity in the heart of software, Addison-Wesley, Boston, 2004.

Hunt, A., Pragmatic unit testing : in Java with JUnit, Pragmatic Bookshelf, Raleigh, N.C, 2004.

Hunt, A., The pragmatic programmer : from journeyman to master, Addison-Wesley, Reading, Mass, 2000.

Gamma, E., Design patterns : elements of reusable object-oriented software, Addison-Wesley, Reading, Mass, 1995.