# Rodolphe Kouyoumdjian

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#### **EDUCATION**

McGill UniversityMontreal, CanadaBSc Computer ScienceAutumn 2022 - Winter 2025

3.86 / 4.0 GPA

Relevant Coursework: Fundamentals of Statistical Learning, Intro to Statistical Computing

King's College LondonLondon, EnglandStudy abroadAutumn 2024

Relevant Coursework: Mathematical Finance I: Discrete Time, Machine Learning for Biomedical Applications

University of Edinburgh Edinburgh, Scotland

Study abroad Winter 2024

Relevant Coursework: Entrepreneurship and Innovation Project

#### **EXPERIENCE**

#### Holoquiz

Health-oriented AI powered quiz making game hologram for students

Winter 2024

- In a team of 4, conceived the software and hardware to generate a health quiz using AI for students to learn in a more interactive way. Asks questions about bodyparts while showing a hologram of it
- OpenAl API, Python, Arduino

#### **Allons Burger**

Mobile restaurant ordering app

Summer 2023

- Built a mobile app and backend using various technologies to improve efficiency and costs. Provided eat-in or delivery options.
- Payment processing, APIs, Authentication, Databases
- Flutter (Dart), express.js (TypeScript), Stripe, Firebase

# scryblr.com

Al content creation and collaboration platform for marketers

Winter 2023

- Launched a full stack SAAS application
- Payment processing, Authentication, Databases, Marketing
- HTML, CSS JavaScript, Flask (Python), Stripe, Firebase, Marketing (Twitter, YouTube, Instagram)

### **Pairlt**

Language learning game for iOS

Summer 2022

- Inspired by the card game "Memory", given words cards in two languages, the player should match the words
  - o Scraped the Project Gutenberg site to find the frequencies of words in 100+ languages
  - o Using spaced repetition, implemented a recommendation algorithm to show words to the user round after round
  - o 200+ downloads
- Mobile programming, team collaboration, data scraping, analysis & manipulation, linguistics
- Swift UI, Xcode, Python

#### **Asset Allocation**

Mean variance portfolio optimization

Autumn 2021

- Given a list of assets, what would be the most <u>optimal portfolio</u>? Use a <u>Monte Carlo</u> method to outline the <u>efficient frontier</u> proposed by the <u>Modern Portfolio Theory</u>
- Python, Statistics, data scraping & analysis

## **Stocks Correlation**

Analyze the correlation between ~500 stocks in 7 industries

Autumn 2021

- Trading highly correlated stocks gives an illusion of diversification, within an industry, which pairs of stocks shouldn't be in the same portfolio?
- Python, Statistics, heatmap visualization, Pearson Coefficient

## **EXTRACURRICULARS**

#### **McGill Robohacks**

Designed a robot in a team of 4 using Arduino and C

Autumn 2023

## **McGill Robohacks**

Hohmann Transfer and Mission to Mars

Autumn 2022

- · Simulated the Hohmann transfer in a two-body context (Sun and rocket), simulated a rocket mission from Earth to Mars
- 3<sup>rd</sup> in astrophysics category, 10<sup>th</sup> overall

## **Scouts**

Scout Saint-Antoine le Grand

2017-2021

- Acquired survival skills, team building, camping, team leading, problem solving. An overall unique and life changing experience
- Learned Morse Code, the ethics of camping, forest cooking, fire making, warmth & anti-mosquito techniques

## **LANGUAGES**

- French Native
- English Native
- Arabic Native
- Spanish B2
- Italian B2