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## SUMMARY

Bachelor's degree graduate in computer science and software engineering with more than 20 years of professional experience in television post-production.

Passionate about IT, media and technology in general.

Speaks and writes English and French fluently.

### **TRAINING**

Sept. 2020 - Dec. 2023 Bachelor of Computer science & software engineering | 3.93 /4.3 GPA

Université du Québec à Montréal (UQAM)

(Transcript available upon request)

1994 – 1996 College diploma in Television production

La Cité collégiale, Ottawa

# **COMPUTER SKILLS**

Web: HTML, JavaScript, React, SCSS(CSS), SVG animation

Other languages: C++, C, Java, Python, SQL

Version management: Git (GitHub, GitLab, BitBucket)

Documentation: Confluence, RAML

Operating systems: Windows, Linux, MacOs

+ Multimedia: Adobe Photoshop, Lightroom Classic, Premiere, Media Encoder,

Avid Media Composer/Symphony, iZotope RX

### PROFESSIONAL EXPERIENCE

May – Aug. 2022 Intern developer, Embedded Video Streaming Systems Matrox Video, Montreal

- Developing tests aimed at validating the HDCP 1.4 and 2.2 (Hi-bandwidth Digital Content Protection) capabilities of a product on an HDMIconnected product
- Programing new C++ functions in a pre-existing code base to simulate and interpret different elements of an HDMI signal

- Creation of Python scripts controlling physical devices via serial ports, REST API commands and JTAG connections
- Creation of Shell scripts to accelerate the process of updating firmware on physical devices
- Documentation of these tests and features in Confluence

### 1997 – 2020

Documentary & Broadcast TV Editor Freelance, Ottawa and Montreal

- Project management; ensuring compliance with specs, technical standards and delivery dates according to client requests
- Working independently, in collaboration with different members of the team
- Delegating tasks and supervising the assistant editor's work
- Analysing and summarising footage; structuring and pacing the content for the desired effect
- Finishing: color correction, special effects, titles, technical compliance and making requested changes
- Writing reports, archiving assets and closing projects

### 1996 – 1997

Technical support specialist
Taima Corporation, Ottawa (for iStar Internet Canada)

- Troubleshooting and resolving internet connection related issues
- Providing technical support to English and French-speaking customers from across Canada

### PRACTICAL WORK

### Web (Fullstack):

• Development of a Flask backend (Python) which retrieves daily open data from the city of Montreal and integrates it into its SQLite database. New additions are then communicated via email, and a suite of REST services allows you to modify/obtain this information according to different formats and parameters. Data can also be accessed from a frontend via Ajax requests and others. Everything is documented via RAML.

#### JavaScript (2D HTML Canvas video game):

- Game designed as a team, in three Agile sprints, from a pre-existing non-optimal code base.
- Implementation of new modular game levels that can be chained together one after
  the other during the game. A set of functions helps in the construction of more complex
  elements from basic building tiles. Each level uses an interchangeable graphic theme
  (jungle, desert, city, snow, volcanoes, etc.) The description of each of these levels and
  characters is stored in JSON format.
- Try it now on mpa.mathieulalonde.com!