Ousmane Telly Touré

11-940 Avenue Myrand
(514) 677-7793
ousmane-telly.toure.1@ulaval.ca
LinkedIn

EDUCATION

Bachelor's degree in Computer Engineering   Since 2019
Laval University, Quebec
- *Cumulative GPA: 3,17/4,33*

COMPUTER AND TECHNOLOGICAL SKILLS

- **Electronic Design**: C/C++
- **Web Application Development:** Python, C#, HTML, CSS
- **Database:** Azure SQL
- **Software and Platforms:** MATLAB/Simulink, Altium Designer, Visual Paradigm, Wireshark, Git, Postman, SharePoint
- **Cloud Computing:** Microsoft Azure specifically Azure Cognitive Services, Azure SQL Database, Azure Blob, Azure Data Factory
- **Web Application Development Environment**: Microsoft Visual Studio, Visual Studio Code, PyCharm
- **Electronic Design Environment:** Arduino IDE, TinkerCad, STM32CubeIDE, Atollic TrueStudio
- **Microcontrollers:** Arduino Uno, Arduino Mega 2560, STM32F407VG
- **Application Programming Interface (API):** Azure OpenAI API, Confluence API
- **Instrumentation and Hardware:** PCB Assembly and Soldering
- **Familiarity** with communication protocols such as **SPI, I2C, UART**
- **Ability** to interface devices through **DMA (Direct Memory Access), interrupts and active polling.**

SPECIAL SKILLS

- Curiosity, organizational skills and responsibility.
- Interest in electronic design and web application development.
- **Language**: Anglais (VEPT: 60 | TOEIC: 800)
- **Health and Safety**: WHMIS Training (Workplace Hazardous Materials Information System, Laval University 2022)
- **Extra credits:** Microeconomics (2020), Structural Biochemistry (2022), Introduction to Mobile Robotics (2022), Parallel and Distributed Programming (2023)
- **Fiber Optics Training** (Bell 2021)

RELEVANT EXPERIENCES IN COMPUTER ENGINEERING

Barcode Reader Design   Winter 2022
Design II Course, Laval University, Quebec

- Designing a prototype barcode reader according to client specifications.
- Programming a simulator to validate the prototype's performance.
- Using the Arduino Mega 2560 microcontroller.
- Using MATLAB/Simulink for the Simulator.

Embedded Project   Fall 2022
Microprocessor System and Interface Course, Laval University, Quebec

- C programming for **UART** driver.
- C programming for **ADC (Analog-to-Digital Converter)** driver.
- C programming for modules enabling DMA **(Direct Memory Access)** transfer.
- Using the **STM32F407VG** microcontroller and **FT232** UART device.
- Interfacing a 16x2 LCD with microcontroller.
- **Project Goal**: Reading the output value of a 10K potentiometer using ADC, displaying it on the LDC and transferring it via DMA and UART to a Python Program for graphical display.

Law Document Parser Project   Summer 2023
KPMG Canada, Microsoft - Generative AI, Quebec

- Allowing upload of legal documents, extracting specific metrics, and asking questions about document content to a ChatGPT-type AI model.
- Creating database tables to store downloaded file content, file type information, and targeted metrics.
- Using Azure Cognitive Services and OpenAI's ChatGPT AI model resources

Blue Cross – Confluence Project   Summer 2023
KPMG Canada, Microsoft - Generative AI, Quebec

- Designing a web application connected to the enterprise content management software, Confluence by Atlassian.
- Allowing users to ask questions directly related to Confluence content, answered by a ChatGPT-type generative AI model.
- Using Azure Data Factory to retrieve Confluence HTML content, process it, store it in a database after removing HTML tags.

CONTINUED RELEVANT EXPERIENCES IN COMPUTER ENGINEERING

Field Service Technician   Summer 2021
Bell Solutions Techniques, Quebec
  • Configuring Bell client Wi-Fi networks
  • Performing various repair tasks

AESGUL Tutor (Association of Students in Sciences and Engineering, Laval University)   Fall 2021
Laval University, Quebec
  • Assisting students in understanding course material and deepening certain concepts.

Teaching Assistant   Fall 2022 – Winter 2023
Advanced C++ Programming, Laval University, Quebec
  • Assisting students in understanding course material and deepening certain concepts.
  • Grading practical assignments and exams.
  • Supervising exams.

Teaching Assistant   Fall 2022
Linear Systems and Controls, Laval University, Quebec
  • Assisting students in understanding course material and deepening certain concepts.
  • Grading lab reports and exams.
  • Supervising exams and labs.

Backend Developer Intern   Summer 2023
KPMG Canada, Microsoft – Generative AI, Quebec - Montreal
  • Designing AI-based web applications.
  • Getting acquainted with various resources on Microsoft's Azure cloud application platform.
  • Documenting new technologies to enhance team knowledge management.

OTHER WORK EXPERIENCES

Warehouse Clerk   Fall 2020 – Winter 2021
La Maison Simons, Quebec

Warehouse Check   Summer 2020
Structube, Montreal

Online orders Specialist   Fall 2022
BestBuy, Quebec

SOCIAL ACTIVITIES AND ENGAGEMENTS

Volunteering for Table de Pain   Fall 2022 - Fall 2023
 Laval University, Quebec

Mentor for the Foreign Student Matching Program   Fall 2021 – Winter 2023
Laval University, Quebec

SCHOLARSHIPS

Excellence Scholarship – Citizens of the World   Winter 2022 and Winter 2023