Cédric Membrez

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Software Engineer specialized in AR/VR for the Industry 4.0 and Digital Twin. Experience on the entire pipeline from CAD to AR/VR applications. Experience in UI, 2D and 3D graphics. Composed, curious, visionary.

EXPERIENCE

07.2023 - Present — **XR Software Engineer** *SKAN, Switzerland*
- Refactoring and optimising the pipeline for 3D-file import
- Implementing features for desktop and VR/XR application software
- Modifying 3D models and designing UI elements
- **Skills**: Pixyz/Python, Unity/C$^\sharp$, UI/UX, Adobe Photoshop / Illustrator, Blender

02.2018 - 04.2020 — **Portfolio Manager** *MFM Mirante Fund Management, Switzerland*
- Managed two global convertible bonds funds & presented the funds across Europe
- Defined strategy & decided for optimal allocation & investments for given regions
- Produced & organized calls for tenders & requests of clients
- **Skills**: result-driven, proactive, take responsibility, interpersonal skills, resilient

02.2014 - 01.2018 — **Quantitative Analyst** *MFM Mirante Fund Management, Switzerland*
- Produced risk reports & performance attribution analyzes (VBA, R/ggplot, LaTeX)
- Analyzed investment opportunities (Bloomberg, VBA, R, Java, SQL)
- Developed risk management tools to improve department efficiency (VBA)
- **Skills**: attention to detail, fast learner, entrepreneurial, resilient, adaptive, reliability

PROJECTS

08.2022 - 06.2023 — **Augmented Reality** *MSc Thesis, University of Fribourg*
- Researched key features & accessible design to gamify low vision rehabilitation
- Interviewed specialists from the Swiss federation for people with visual impairments
- Implemented a serious game escape room using Unity/C$^\sharp$ on Microsoft Hololens 2
- **Skills**: Unity/C$^\sharp$, MRTK; UI/UX, user-centered, empathy, research, analysis

10.2022 - 01.2023 — **Embedded Software - Robotic** *Team project (Git repo) - University of Fribourg*
- Programmed on Espressif, Arduino, Raspberry microcontrollers in C/C++, Python
- Communicated between boards using MQTT, WebSocket, and UART protocols
- Integrated pre-build machine learning models for face recognition
- **Skills**: C/C++, Python (OpenCV); problem solving, solution oriented, prototyping

02.2021 - 09.2021 — **Virtual Reality** *University of Fribourg*
- Developed an adventure video game with Unity/C$^\sharp$ on Oculus Quest 2
- Presented my project at the annual university open-days
- **Skills**: Unity/C$^\sharp$, Blender; autonomous, creativity, design thinking

EDUCATION

09.2020 - 06.2023 — **MSc Computer Science** *University of Fribourg, Switzerland*
- Pre-MSc: data structures, databases, algorithms, software engineering, operating systems, concurrent & distributed systems
- Specialized in advanced information processing: user centered design, affective computing, game development, deep learning, big data, cloud computing

11.2021 — **CFA - passed all three exams** *CFA Institute*

09.2011 - 01.2014 — **MSc Quantitative Finance** *WU Vienna University of Economics & Business, Austria*

09.2007 - 09.2011 — **BSc Economics** *HEC Lausanne, Switzerland*
- Final year exchange at Aalto University School of Economics, Helsinki, Finland

SKILLS

Languages	French: native | English: fluent/C1 | German: intermediate/B1
IT	C$^\sharp$, C/C++, Java, Python, SQL | Unity, Unreal | Blender, Pixyz, Photoshop, Illustrator

ACTIVITIES

02.2016 - Present — **Piano** *Classical music*
09.2012 - 09.2013 — **WU Qfin Club** *Cofounder, Austria*
09.2009 - 09.2010 — **HEC Espace Entreprise Association** *Head of Internships Division, Switzerland*
08.2008 - 11.2014 — **Marathons** *Athens 2014, Vienna 2013, London 2010 & San Francisco 2008*