CV – Alexandre Mercier-Aubin

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Nationality	Canadian	**Website**	alexandremercieraubin.com

Personal Profile

Graduate student at McGill University in computer science. My fields of study are computer graphics, algorithm design, and constraint programming.

Education

2020-2024 PhD in Computer Science - McGill University
ABD
GPA: 3.90

2019-2020 M. Sc. in Computer Science - Université Laval
Research in constraint programming with Prof. Claude-Guy Quimper
GPA: 3.93

2017-2019 B. Sc. in Computer Science - Université Laval
honors
GPA: 3.73

2014-2017 DEC in Computer Science - Cégep Lévis-Lauzon

Experience

Present McGill
teaching assistant and AGSEM delegate

Hold office hours, mark exams, and present various guest lectures for the courses on computer graphics, computer animations, and introduction to computer systems.

2020 Université Laval
teaching assistant

Teach the practical aspect (weekly labs) of the advanced programming in C++ course. Mark the exams in the computer graphics course. Support students at the help centre for computer science students (CARÉ) with questions related to 15 different computer science courses.

2018/05, 2018/09 Activision, Beenox
game engine developer intern

Design and program the game engine for Call of Duty: Black Ops 4.
Technologies: DirectX, C++, LUA
Contributions: Shaders, LOD formulas, Bugfixes, HUD formulas, cross-platform compatibility, etc.

2017/01 - **2017/08**	Centre de Robotic et Vision Industrielle *Intern/Programmer*
	Machine learning applied to Computer Vision, program robot controllers, and develop a new website for employees.
2016/05 - **2016/09**	Valero, Levis *computer science intern*
	Translate programs from Visual Basic to C#.
2015/05 - **2015/09**	Consortium de ressources et d'expertises coopératives *IT Technician*
	IT support, creating and managing a database, creating a web site, etc.

Prizes and Scholarships

- **Fonds de recherche du Québec (FRQNT): 2nd and 3rd cycle scholarship**
  25 000$ *per year, up to 3 years*

- **Natural Sciences and Engineering Research Council of Canada (NSERC) Alliance Grant**
  15 000

- **Bourse de doctorat Hydro-Québec en Science**
  15 000$ *per year, up to 2 years*

- **School of Computer Science PhD funding, McGill University**
  21 000$ *per year, up to 3 years*
  3 000$ top up from Mechanical Engineering.

- **MITACS accelerate, CRISI**
  39 000$

- **Undergraduate Research Fellowship 2019-2020, Université Laval**
  I declined 6500$

- **Association for Constraint Programming, CP2019**
  450$

Research

All of my publication are listed on my website: alexandremercieraubin.com/Work

Leadership

- **Leader in various undergraduate team projects**: Gaudrophone, BigData7027, and ComputerGraphics, etc.

- **Team leader in the Valleyfield Game Jam**

Other Projects

- **Engines**

  -Adaptive Rigidification Engine
  -A simple computer graphics engine

- **Video games I worked on:**

  -Call of Duty: Black Ops 4
  -Proto-Spyder Assault, 48h Valleyfield game dev contest
  -SansFin, french horror game, Cegep school project

Community and Academic Service

AGSEM Delegate: Delegate of the Computer Science department at McGill.
V.P. Social at the AGIL: Organize events for the association of graduate student in computer science.
Volunteer at the ASETIN: Volunteer work at the student association of computer science. I've been a bartender, receptionist, and helped prepare the student initiations.
Volunteer at Lévis: Receptionist at the Water Festival of Lévis.
Student volunteer at SCA 2020: Support the week-long conference by ensuring the smooth functioning of operations in technical paper sessions and main exhibitions.

Referees

Name	Claude-Guy Quimper	Name	Paul G. Kry
Company	Université Laval	**Company**	McGill University
Position	Full Professor	**Position**	Full Professor
Contact	Claude-Guy.Quimper@ift.ulaval.ca	**Contact**	kry@cs.mcgill.ca