

# Alexys Dussier

**ENSEEIHT**, Senior Gameplay Engineer and Gaming Startupper

## Contact

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## Languages

French: native  
English: bilingual  
Japanese: beginner

## Hobbies

**Magic The Gathering**  
Competitive play for 15 years

## Volleyball

Up to 4 times a week for 6 years

## Go

Creation and management of a club in high school

## Favorite Games

StarCraft 2  
best rank: Master  
Magic The Gathering  
best rank: Top 100  
HearthStone  
best rank: Top 500  
Outer Wilds  
Tunic  
Dark Souls

## Soft Skills

Critical thinker  
Autonomous  
Ambitious  
Empathetic  
Pragmatic

## About Me

I am looking for a position as a Senior Gameplay Developer or Software Development Engineer in a united, skilled, and passionate team.

## Work Experience

2024 - Today	<b>Cards of the Abyss</b>	Creation of a video game studio	Unity Developer
1.5 Years	Development of a Tactical Roguelike Deckbuilder.	Model/view separation. Data-driven. C#. Shaders. VFX. Analytics and balancing. Midjourney. Project management. Git. Freelancer recruitment.	
2023 - 2024	<b>Quantic Dream</b>	AAA video game studio	Network C++ Gameplay Developer
1.5 Years	Redesign and extension of game systems (Damage and DPS System, Health System, Entity Stats and Aggregators), AI development (Pathfinding, Locomotion, Abilities sequencing and cooldowns), multiplayer infrastructure with rollback and deterministic systems, Mind Control design (alternative controller, from FPS to RTS), optimizations, improvement of development standards, creation of statistics systems (Kill statistics, Weakness tags), Perforce P4V, Jira		
2023 - Today	<b>Quantiq.io</b>	Medical Deep Learning and Time Series	AI Researcher
1.5 Months	Deep Learning research to analyse cardiac data from video selfies. Research, DenseNet, Early-stopping, Cross-validation, Equal-sampling, Visualization, Pytorch, Numpy, Pandas, Matplotlib, Python		
2021 - 2022	<b>Cube Overflow</b>	Creating a gaming company	Unity Developer
1.5 Years	<i>The Netrunner Awaken1ng: developing a Hack'n'Dash steam game from design to deployment. Developing 50 levels, each with a unique mechanic, using a modular and procedural map generation algorithm. Hiring and collaborating with freelancers for sound and marketing. Writing an AI-related story. More details here: <a href="https://netrunner-awakening.com">https://netrunner-awakening.com</a></i>		
2020	<b>Antidot</b>	R&D Development Engineer	Python Developer
1 Year	<i>Working in a product knowledge platform company focusing on creating search engines for enterprise knowledge. ML Transformers, Naming Entity Recognition (NER), Relationship graphs, Textual data processing, Continuous Integration, Test Driven Development, Conditional Random Fields, Docker</i>		

Summer 2018	<b>Immersive Factory</b>	Internship in a VR company	Unity Developer
3 Months	<i>Experiencing for 3 months the video game company workflow C#, Unity, Virtual Reality, Level Design, CI/CD, Unity Web Request</i>		

## Education

2018 - 2019	<b>DDJV</b>	Degree in Video Game Development	Double Degree in Canada
1 Year	<i>University of Sherbrooke in Montréal</i>		
2016 - 2018	<b>INP-ENSEEIHT</b>	Computer Science & Applied Mathematics	Engineering School
2 Years	<i>National Polytechnic School of Electrotechnic, Electronics, Computing, Hydraulics and Telecommunications</i>		
2014 - 2016	<b>MPSI/MP Pierre de Fermat</b>	Mathematics & Physics	Preparatory Course
2 Years	<i>Majoring in Computer Science</i>		
2011 - 2014	<b>Toulouse Lautrec</b>	Scientific Diploma	Secondary School
3 Years	<i>With Honors</i>		

## School Projects

Winter 2019	<b>3D Third Person Game</b>	TPS asymmetric online videogame	Unreal Developer
4 Months	<i>Develop an entire video game with agile methods in a team of 7 persons</i>		
	<i>C++, Unreal, Agile Methods, Object-Oriented Programming, Networking, Real-time systems, Symbolic AI (Squads), Data-Driven Gameplay</i>		
Autumn 2018	<b>AIBootCamp</b>	Game AI Programming Challenge	C++ Developer
3 Months	<i>Experiencing and solving for 3 months all the issues of Symbolic AI in video games</i>		
	<i>C++, Symbolic AI, Agile Methods, Pathfinding (with doors!), Cooperative Agents, 5ms constraint, Parallel systems</i>		
2017 - 2018	<b>ENSEEIHT projects - Multimedia</b>	Coding in small teams	Matlab Developer
Over 1 Year	<i>Tensorial surfaces, Principal component analysis, Face Recognition, Denoising, Inpainting, Segmentation by classification, Variational Methods, Data Reduction, Object Detection, Image Recovery. Using Agile methodologies</i>		
2016 - 2017	<b>ENSEEIHT projects - General</b>	Coding in small teams	Java Developer
Over 1 Year	<i>Object-Oriented programming, Web Development, Digital Optimization, Probability and statistics, Differential Calculus, Linear Algebra, Parallel Systems, Graph Theory, Database. Using Scrum and Agile methodologies</i>		
July 2017	<b>IncubWeb</b>	Internship in a Web Developing Company	Web Developer
1 Month	<i>HTML, CSS, PHP</i>		
May 2017	<b>RogueLike Game</b>	Leading and Managing a 6 persons team	Java Developer
3 Months	<i>Java, Architecture Design, Procedural Level Generator</i>		
Oct. 2016	<b>Carbon Literacy Project</b>	Raise carbon literacy awareness	Online training
2 Weeks	<i>Official certificate</i>		

## Personal Projects

You can visit my website for more details: <https://alexs.dussier.fr>

August 2019	<b>Standford ML Course</b>	Online formation in Deep Learning	Formation
1 Month	<i>Neural Networks, Backpropagation, ConvNets, Localisation &amp; Detection, Visualization, Recurrent Neural Networks, Segmentation</i>		
August 2019	<b>MIT AI Course</b>	Online formation in Artificial Intelligence	Formation
1 Month	<i>Goal-Tree, Expert System, A*, Minimax, KNN, Neural Networks, Genetic Algorithms, SVM, Boosting</i>		
July 2019	<b>Self-Learning Project</b>	State-of-the art Machine Learning	Formation
3 Months	<i>Reproduction of the AlphaZero algorithm from scratch</i>		
	<i>C#, Python, Tensorflow, Numpy, Monte-Carlo-Tree-Search, UCB1, PUCB, Deep Neural Networks</i>		
June 2019	<b>Machine Learning Course</b>	Online formation in Machine Learning	Formation
1 Month	<i>Python, Tensorflow, Deep Neural Networks, Convolutional Neural Networks, Recurrent Neural Networks</i>		
May 2019	<b>Google Cloud OnBoard</b>	Formation in Cloud Computing Services	Formation
1 Weekend	<i>Machine Learning, Scalability, Cloud</i>		
March 2019	<b>Google Code Jam</b>	Participating in about 10 Code Jams	Coding Competition
Lot of Weekends	<i>C++, Dynamic Programming, Knapsack problem, Optimizations, Bit shifting, Sliding window, Backtracking, Linked lists, Binary searches</i>		
October 2018	<b>HadokeMDP</b>	Reinforcement Learning AI on StreetFighter Bot	Unity Developer
1 Weekend	<i>Reinforcement Learning, Q-Learning, Unity</i>		
2017 - 2019	<b>3 Game Jams</b>	Designing, Developing, Not sleeping	Unity Developer
3 Weekends	<i>2D Game, Unity, 48h programming, Virtual Reality Game, Pair Programming</i>		
Summer 2018	<b>3D Parkour Game</b>	3D platforming video game project	Unity Developer

3 Months	<i>Complex movement gameplay system, Unity, Architecture Design, OOP</i>	
March 2018	<b>Card Game</b> Designing, Developing, Manufacturing	Card Game Designer
1 Month	<i>Deck Building Card Game, Testing, Balancing, Iterating</i>	
February 2017	<b>Clicker Game</b> Designing, Developing, Coding	Java Developer
1 Month	<i>Skinner effect, Pair Programming, Slick2D</i>	
2015-2017	<b>Card Game</b> Designing, Developing, Manufacturing	Card Game Designer
	<i>Variable Testing, Balancing, Iterating</i>	
2015	<b>2D Parkour Video Game</b> Designing, Developing, Coding	C & SDL Developer
2 Months	<i>2D Graphic Isometric Engine, C</i>	
2013	<b>Icon Rush 2</b> Designing, Developing, Coding	C & SDL Developer
2 Months	<i>My First Video Game!</i>	