

# Alexys Dussier

ENSEEIH, Senior Gameplay Engineer and Gaming Startupper

## Contact

🏠 Paris, France  
☎ (+33) 6 51 02 42 43  
✉ alexys.dussier@gmail.com

🌐 <https://alexys.dussier.fr>  
🌐 alexys-dussier  
🌐 [gitlab.com/Ekalawen](https://gitlab.com/Ekalawen)  
🌐 [github.com/Ekalawen](https://github.com/Ekalawen)

## 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 **Cards of the Abyss** 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 **Quantic Dream** 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 **Quantiq.io** 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 **Cube Overflow** Creating a gaming company Unity Developer  
1.5 Years **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: <https://netrunner-awakening.com>*
- 2020 **Antidot** R&D Development Engineer Python Developer  
1 Year *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*
- Summer 2018 **Immersive Factory** Internship in a VR compagny Unity Developer  
3 Months *Experiencing for 3 months the video game company workflow C#, Unity, Virtual Reality, Level Design, CI/CD, Unity Web Request*

## Education

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

## 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><br><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><br><i>C++, Symbolic AI, Agile Methods, Pathfinding (with doors!), Cooperative Agents, 5ms constraint, Parallel systems</i>               |  |                  |
| 2017 - 2018 | <b>ENSEEIH 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>ENSEEIH 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://alexys.dussier.fr>

|                 |  |  |                    |
|-----------------|--|--|--------------------|
| August 2019     | <b>Stanford 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><br><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 |
| Variable      | <i>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>  |                    |