# Alexys Dussier

**ENSEEIHT**, Graduate Engineering Student, Programmer, Game Designer LvL 1

*"A good idea is something that does not solve just one problem, but rather can solve multiple problems at once." Shigeru Miyamoto*

## Contact

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## Languages

French: native
English: bilingual
Japanese: beginner

## Hobbies

**Magic The Gathering**
Competitive play for 10 years
Tournament each week

**Six beat Rock**
Each week for a year

**Go**
Creation and management of a club at high school

**Favorite Games**
StarCraft 2
  rank: Master
HearthStone
  rank: Legend
Ori and the Blind Forest
Speluncky

## Soft Skills

Critical thinker
Autonomous
Ambitious
Empathetic
Pragmatic

## About Me

I am looking for a job as Research Engineer in Artificial Intelligence.
I am an IT graduate student engineer passionate about designing and creating games and emergent AI algorithms. My dream is to participate in the research for the first General AI.

## Education

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

## School Projects

| | | |
|---|---|---|
| Winter 2019 | **3D Third Person Game** TPS asymetric online videogame *4 months in a team of 7 to develop an entire video game with agile methods* *C++, Unreal, Agile Methods, Object-Oriented Programming, Networking, Real-time systems, Symbolic AI (Squads), Data-Driven Gameplay* | Unreal Developer |
| Autumn 2018 | **AIBootCamp** Game AI Programming Challenge *Experiencing and solving for 3 months all the issues of Symbolic AI in video games* *C++, Symbolic AI, Agile Methods, Pathfinding (with doors!), Cooperative Agents, 5ms constraint, Parallel systems* | C++ Developer |
| Summer 2018 | **Immersive Factory** Internship in a VR compagny *Experiencing for 3 months the video game company workflow* *C, Unity, Virtual Reality, Level Design, Continuous Development, Unity Web Request* | Unity Developer |
| 2017 - 2018 | **ENSEEIHT projects - Multimedia** Coding in small teams *Tensorial surfaces, Principal component analysis, Face Recognition, Denoising, Inpainting, Segmentation by classification, Variational Methods, Data Reduction, Object Detection, Image Recovery* *Using Scrum, Agile methodologies* | Matlab Developer |
| 2016 - 2017 | **ENSEEIHT projects - General** Coding in small teams *Object-Oriented programming, Web Development, Digital Optimization, Probability and statistics, Differential Calculus, Linear Algebra, Parallel Systems, Graph Theory, Database* *Using Scrum, Agile methodologies* | Java Developer |
| July 2017 | **IncubWeb** Internship in a Web Developing Company *HTML, CSS, PHP* | Web Developer |

| | | |
|---|---|---|
| May 2017 | **RogueLike Game** Leading and Managing a 6 persons team | Java Developer |
| | *Java, Architecture Design, Procedural Level Generator* | |
| Oct. 2016 | **Carbon Literacy Project** Developed carbon literacy awareness | Online training |
| | *Official certificate* | |

# **Per**sonal Projects

| | | |
|---|---|---|
| Currently | **Standford ML Course** Online formation in Deep Learning | Formation |
| | *Neural Networks, Backpropagation, ConvNets, Localisation & Detection, Visualization, Recurent Neural Networks, Segmentation* | |
| Currently | **MIT AI Course** Online formation in Artificial Intelligence | Formation |
| | *Goal-Tree, Expert System, $A^*$, Minimax, KNN, Neural Networks, Genetic Algorithms, SVM, Boosting* | |
| Currently | **Self-Learning Project** State-of-the art Machine Learning | Formation |
| | *Reproduction of the AlphaZero algorithm from scratch* *C#, Python, Tensorflow, Numpy, Monte-Carlo-Tree-Search, UCB1, PUCB, Deep Neural Networks* | |
| June 2019 | **Machine Learning Course** Online formation in Machine Learning | Formation |
| | *Python, Tensorflow, Deep Neural Networks, Convolutional Neural Networks, Recurent Neural Networks* | |
| May 2019 | **Google Cloud OnBoard** Formation in Cloud Computing Services | Formation |
| | *Machine Learning, Scalability, Cloud* | |
| March 2019 | **Google Code Jam** Participating in 2 Code Jam | Coding Competition |
| | *Almost reaching round 2!* *C++, Dynamic Programming, Knapsack problem, Optimizations, Bit shifting* | |
| October 2018 | **HadokeMDP** Reinforcement Learning AI on StreetFighter Bot | Unity Developer |
| | *Reinforcement Learning, Q-Learning, Unity* | |
| March 2019 | **Game Jam** Designing, Developing, Not sleeping | Unity Developer |
| | *2D Game, Unity, 48h programming* | |
| 2018 - 2019 | **Personal WebSite** Developing, Used to present my projects | Web Developer |
| | *HTML, CSS, PHP, BootStrap* | |
| August 2018 | **Game Jam** Designing, Developing | Unity Developer |
| | *Virtual Reality Game, Unity, Pair Programming* | |
| Summer 2018 | **3D Parkour Game** 3D platforming video game project | Unity Developer |
| | *Complex movement gameplay system, Unity, Architecture Design, Oriented-Object Programming* | |
| March 2018 | **Card Game** Designing, Developing, Manufacturing | Card Game Designer |
| | *Deck Building Card Game, Testing, Balancing, Iterating* | |
| February 2017 | **Clicker Game** Designing, Developing, Coding | Java Developer |
| | *Skinner effect, Pair Programming, Slick2D* | |
| January 2017 | **Game Jam** Designing, Developing | Unity Developer |
| | *2D Game, Unity, 48h programming* | |
| 2015-2017 | **Card Game** Designing, Developing, Manufacturing | Card Game Designer |
| | *Testing, Balancing, Iterating* | |
| 2015 | **2D Parkour Video Game** Designing, Developing, Coding | C & SDL Developer |
| | *2D Graphic Isometric Engine, C* | |
| 2013 | **Icon Rush 2** Designing, Developing, Coding | C & SDL Developer |
| | *My First Video Game!* | |