



# Andrei Gafita

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Date of birth 12/06/1998

## OBJECTIVES

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An ambitious, highly adaptable and diligent programmer, driven by Game Development. Looking for an opportunity to grow and open to learning new skills and working in any programming field. Really interested in moving to Switzerland.

## EDUCATION

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**Alexandru Ioan Cuza University of Iasi**

**Iasi, Romania**

*Bachelor of Computer Science, GPA 8.71/10, Bachelor's degree Exam 9.62/10*

*October 2017 - July 2020*

I particularly enjoyed:

Software Engineering, Object-Oriented Programming, Computer Networks, Data Structures, Databases, Computer Graphics, Web Technologies, Graph Algorithms, Operating Systems, Artificial Intelligence, Machine Learning, Neural Networks, Cloud Computing.

## TECHNICAL STRENGTHS

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<b>Programming Languages</b>	C/C++, C#, Python, SQL, Java, JavaScript, Scala, PHP, PL\SQL
<b>Software &amp; Tools</b>	Git, Django, MySQL, Unity3D, Unreal engine, OpenGL, LaTeX
<b>Industry Knowledge</b>	Object-Oriented Programming, Algorithms, Game development
<b>Other Skills</b>	Automata, Petri Nets, Genetic Algorithms, Machine Learning
<b>Languages</b>	Romanian(native), English(proficient)

## ACADEMIC PROJECTS

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**Bachelor's Thesis (C#, Unity3D) - graded 10/10**

*October 2019 - June 2020*

- One on one fighting game in which two knights attack each other until one of them dies, then another round commences. I created everything from scratch except for some graphical elements.
- A deterministic finite automaton orchestrates the behavior of the AI bots and improves itself to beat the player using genetic algorithms.
- Realized a serialization for the agent's behavior that can be uploaded using the user interface.
- Added two game modes, PVB(Player versus Bot) in which the human can play versus an AI and BVB(Bot versus Bot) in which 2 AIs(different or the same) compete. BVB mode is for training the AIs by evolving during many rounds.

**MarIO (Python, Keras)**

*Dec 2019 – Jan 2020*

- New implementation, graphics and sprites for the Mario game.
- Neural network based on reinforcement learning to help the agent learn how to play.

**Kastor (Python)**

*Dec 2019 – Jan 2020*

- Framework that used a multilayer perceptron neural network to perform regression on Facebook Comment Volume Dataset.
- I collaborated with 2 colleagues.
- I integrated optimizers such as Adam and Rmsprop.

**FII-Student (Python, Django, PostgreSQL)***Mar 2019 – Jun 2019*

- Group project (28 peers) that built a timetable and announcement management website for the faculty.
- We followed Scrum methodology in order to deliver frequent results to the client (our professor).
- I developed the database and the timetable features, eg. transfer of a student from a seminar to the other, together with another student.
- I established a 3D application using Unity3D that allowed the user to explore the faculty building. The model had all the entrances, classrooms, bathrooms, elevators and professor cabinets. The application also featured teleportation to classrooms and how to get from a class/entrance to another one by using teleportation and path finding.

**YoMovie (PHP, Javascript, HTML, CSS, MySQL)***Apr 2019 – Jun 2019*

- Web platform similar to Youtube that handles choose-your-own-adventure type of movie. After the user watches a movie, he/she is given a choice and depending on the choice another movie will be played, leading to a different outcome.
- Group project implemented together with 2 colleagues.
- I had an important contribution on front-end logic and the UI interactions with the back-end.
- I also developed back-end elements regarding the model-view-controller (MVC) implementation.

**LearNet (C, SQLite3)***Dec 2018 – Jan 2019*

- LearNet is a client/server application that I developed for the Computer Networks course.
- Account based platform created in C in which the clients are the students and teachers. Teachers can upload lectures and administrate the app and students can read the lectures and join a chat with other students reading the same lectures. The clients can also engage in one-on-one chats with other clients and the history of the chat is maintained.

**Lord of the Arena (C#, Unity3D)***Apr 2017 – May 2017*

- Lord of the Arena is a game that focuses around an arena. The player had different magic spells and had to fight endless rounds with the enemies until he would die. The round in which he dies represents the player's score.
- The game received an IT certificate.