

MOROȘAN MIHAIL

Programmer, AI Researcher

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EXPERIENCE

Consulting, Programming

Mindark

2016

Gothenburg, Sweden

- Worked with Mindark Sweden to see if and how my research can be applied to their games, while also offering insight into the current state of artificial intelligence research.

Lab Assistant

CE320 - Extreme Programming and Large Scale Systems

2015 - 2017

University of Essex, Colchester, UK

- Responsible for both the practical labs, and the marking, of a course teaching students how to effectively work in a team, how to use version control software and how to develop code in a test-driven manner.

Programming

EssexLab

2014

Colchester, UK

- Responsible with developing Ztree-based economics experiments.
- Part of the managing team of *hroot*, the Ruby on Rails-based server used to accept registrations to experiments hosted by EssexLab.

Management Internship

Barclays

2012

London, UK

- As part of the Future Leaders Development Programme, I worked on a few internal projects in the Customer Experience team in the London HQ of Barclays.

Leadership

Essex e-Sports Society

2011 - 2013

Colchester, UK

- Founded and managed, as president, the first university e-Sports society at the University of Essex and one of the first in the UK.
- Organised a multitude of successful gaming and social events, created partnerships with a few organisations around Colchester and, most importantly, brought together many like-minded people.

Freelancer, Programming

[Various]

2011 - 2014

- Solved minor problems and implemented features for various clients worldwide as a web-development freelancer. Mostly worked with PHP, Drupal, Joomla, JavaScript and C#.

STRENGTHS

Problem Solving

Leadership

Transparency

Public Speaking

C#

Machine Learning / AI

Algorithm Optimisation

C++

Debugging

EDUCATION

Ph.D. in IGGI

University of Essex

Sep 2014 - Sep 2018 (expected)

Thesis title: Computational Intelligence and Game Balance (WIP)

M.Sc. in Advanced Computer Science

University of Essex

Oct 2013 - Sep 2014

Achieved an aggregate mark of 72%

B.Sc. in Computer Science

University of Essex

Oct 2010 - Jun 2013

Achieved an aggregate mark of 80%

LANGUAGES

English



Romanian



German



PROJECTS

Sharp Genetics

C# Genetic Evolution Library

📅 2014 - 2017

C# library for evolutionary algorithms and genetic programming. Makes use of smart templating to abstract the common genetic behaviour, while allowing for a wide variety of tasks to be solved.

It aims to be quick and efficient, as well as scalable and, where possible, innovative.

OCAPE

Competition Support Software

📅 2013 - 2014

Software for managing, compiling, evaluating and reporting on programming implementations to various tasks. Supports C++, C#, Python and Java.

Particularly useful when used to run programming competitions, or keep track of the best solutions for open research tasks.

Genesis Dei

MMO Diplomatic Turn Based Strategy Game

📅 2014 - 2016

A complex strategy game, with players having to band together to even think of achieving any success. Good planning and strategic leadership are critical skills to have, with depth coming not from the game mechanics themselves, but from how they are applied on the field.

Balance Specs

Evolution-based Balance Automation Visual Interface

📅 2016 - 2017

As part of my research into means of applying AI to game balance, one of the biggest findings was the reluctance of game developers to spend significant amounts of time learning and implementing algorithms developed by academia.

Balance Specs aims to bring genetic evolution and any improvements I developed to the arsenal of tools game designers and developers have at their disposal, with minimal effort.

PUBLICATIONS

👥 Conferences

- Morosan, Mihail and Riccardo Poli (2017a). "Automated Game Balancing in Ms PacMan and StarCraft Using Evolutionary Algorithms". In: Springer, Cham, pp. 377–392.
- – (2017b). "Evolving a designer-balanced neural network for Ms PacMan". In: *9th Computer Science and Electronic Engineering Conference (CEEC)*.
- – (2017c). "Speeding up genetic algorithm-based game balancing using fitness predictors". In: *Genetic and Evolutionary Computation Conference (GECCO)*.

MISCELLANEOUS



O'Reilly Academic Prize

for outstanding achievements in 2011



Silver Medal

at the 2008 Romanian National Programming Olympiad



CCNA 1

Cisco networking certificate received in 2011



Toastmasters Intl. Speechcraft

certificate attesting the successful completion of public speaking courses



Global Game Jam

took part in several game jams with the goal of developing a game in 48 hours

TECH SKILLS

C#

C++

Python

JavaScript

Pascal

Ruby

LaTeX

SQL

PHP

Accord Framework

Jekyll

Visual Studio

RabbitMQ

Unity 3D

Git

SVN

Basic Video Editing

Basic Audio Editing