

MOROŞAN MIHAIL

Programmer, AI/ML Researcher

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EXPERIENCE

Tech Lead Manager

Thought Machine

📅 Sep 2020 - now

📍 London, UK

- Responsible for the Migrations team within the Bank Setup department.
- Main goal is developing the tooling behind moving data between legacy systems and Vault.

Backend Engineer

Thought Machine

📅 2019 - Sep 2020

📍 London, UK

- Backend Engineer at a leading Fintech company in their Kernel team.
- Developed many features for the company's main product, Vault, using Golang and Python.
- Designed and spearheaded development of a major component of Vault.

Design, Programming, Computer Vision, DevOps

NMT Group

📅 2018 - 2019

📍 London, UK

- Main programmer for a startup specialising in developing machine learning tools for use by legal teams within various companies.
- Tasked with developing the web portal, as well as computer vision and machine learning based tools for solving tedious manual processes.
- Also handled the deployment of all software solutions to Azure.

Consulting, Programming

Mindark

📅 2016

📍 Gothenburg, Sweden

- Worked with Mindark Sweden to see if and how my doctoral 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 how to effectively work in a team, how to use version control software and how to develop code in a test-driven manner.

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.

STRENGTHS

Problem Solving

Leadership

Transparency

Public Speaking

C#

Machine Learning / AI

Algorithm Optimisation

C++

Golang

Debugging

Profiling

EDUCATION

Ph.D. in Machine Learning

University of Essex

📅 Sep 2014 - Sep 2018

Thesis title: Automating Game-design and Game-agent Balancing through Computational Intelligence

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



SAMPLE PROJECTS

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 - 2018

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.

It also included Sharp Genetics, a genetic algorithm library written in C# written from scratch to be scalable, quick and as extendable as possible.

PUBLICATIONS

👥 Conferences

- Morosan, Mihail and Riccardo Poli (2018a). "Lessons from Testing an Evolutionary Automated Game Balancer in Industry". In: *2018 IEEE Games, Entertainment, Media Conference (GEM)*.
- - (2018b). "Online-Trained Fitness Approximators for Real-World Game Balancing". In: *EvoApplications track of EvoStar 2018*.
- - (2017a). "Automated Game Balancing in Ms PacMan and StarCraft Using Evolutionary Algorithms". In: *EvoApplications track of EvoStar 2017*.
- - (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



Society President

founded and led a university society for two years. Organised a multitude of successful gaming and social events, created partnerships with a few organisations around Colchester and brought together many like-minded people

TECH SKILLS

C#

C++

Python

Golang

JavaScript

Pascal

Ruby

LaTeX

SQL

PHP

Accord Framework

Azure

Jekyll

Visual Studio

RabbitMQ

Unity 3D

Git

SVN

gRPC

Kafka

Protobuf

Basic Video Editing

Basic Audio Editing

Basic DevOps