Mat Zaremba

Programmer, Mathematician, Graduate student

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Currently Studying towards MSc in Mathematics and Data Science at the University of Stirling

Specialized in C++, Python, R, Statistical Analysis, Big Data

Research interests Statistical analysis for data science, representing and manipulating data using R and

Python programming

Education University of Stirling, United Kingdom

MSc in Mathematics and Data Science

Representing and Manipulating Data (Merit-64%)

Commercial and Scientific Applications (Merit-62%)

Statistics for Data Science (Pass-50%)

Networks & Graph Theory

Data Analytics

 ${\bf Modelling\ in\ Financial\ and\ Medical\ Systems}$

Stochastic Processes and Optimisation

Dissertation Project

University of Abertay Dundee, United Kingdom

2015-2018

2019-2021

BSc with Merit in Computer Game Applications Development, 2:1

3rd year modules (GPA: 2.83):

Graphics Programming with Shaders (C+)

Gameplay Mechanics Development (C+)

Network Systems for Game Development (A)

Artificial Intelligence (B)

Professional Team Project: Planning and Prototyping (C+)
Professional Team Project: Development and Delivery (C+)

2nd year modules (GPA: 4.17):

Data Structures and Algorithms 1 (A)

Data Structures and Algorithms 2 (A+)

Graphics Programming (A)

Game Programming and System Architectures (A)

Film and Game Genres (A)

Mathematics for Application Development 2 (A+)

1st year modules (GPA: 3.63):

Computer and Graphics Architectures (A)

Programming in C++ (A)

Narrative Theory in Interactive Game Design (C+)

Mathematics for Applications Development 1 (A+)

Asset Production for Games (B+)

Games for Change (B+)

Funding Awarded

The Data Lab MSc scholarship

Sep 2019-Aug 2021

Fully funded MSc place; ± 6500 towards tuition fees

Training with Data Scientists

Relevant Experience

C++ Software Engineer Intern, Viastore

Jan-Feb 2019

Learned about:

Relational and non-Relational Databases using SQL and C++

Large distributed IT systems
Business use of rapid prototyping

Unreal Game Programmer Intern, Bohemia Interactive

Aug-Oct 2018

Project worked on: <u>Vigor</u>, post-apocalyptic survival game

Internship responsibilities:

Networked gameplay programming

UI programming

Prototyping

Developing new solutions based on already existing ones and bug fixing

Lead Programmer, Abertay University: Professional Project

Sep 2017-Jun 2018

Projects worked on:

Mobile game for Junkfish Game Company

Retro platformer for <u>Timex</u>

Engine: Unity

Programming language: C#

Platforms: Android (Junk Fish), Windows (Timex)

<u>git</u>

Key responsibilities:

Prototyping

Game programming

Source control maintenance: merging, pull requests, .gitignore

Team management:

Kanban boards with GitHub Projects SCRUM (Deadlines setting, mentoring)

Hackathons

Gameplay Programmer/Design/Team Lead, Serious Game Jam

Jan 24-26,

2018

Mobile game prototype:

Aid for lectures and students from the University of St Andrews, with preparation and explanation of their practical exercises

Engine: Unity

Programming language: C#

Platform: Android gameplay video , git

Gameplay Programmer/Design/Team Lead, AGDS 4-hour Game Jam

Nov 8, 2017

Brief visual novel with animations, telling a joke

Made in 4-hours with two artists

Engine: Ren'Py

Programming language: Python

Platform: Windows gameplay video , git

Gameplay Programmer/Design/Team Lead, Rainbow Game Jam

Aug 15-17,

2016

Infinite runner chosen to be made in 48-hours with two other artists and a sound designer

Engine: Unity

Programming language: C# Platforms: Windows, MAC, Linux gameplay video , git , play in browser

Gameplay Programmer, Global Game Jam 2016

Jan 29-31,

2016

Easy pick-up game. My first Unity project and first game jam

Engine: Unity

Programming language: C# Platforms: Windows, MAC, Linux

gameplay video

Societies	Member of Abertay Game Development Society: 1st year project, 2nd year project	Sep 2015-Jul 2018
Volunteer Experience	Answering Questions About Mathematics and Coding on Quora My Quora Answers	Jul 2019-Present
	Built and managed St Andrew's RC Cathedral website http://www.standrewscathedraldundee.com/	Sep 2017-Aug 2018
	1st Year Class Representative at Abertay University Listening to student feedback and liaising with lectures Attended training about leadership and teamwork	Sep 2015-Apr 2016
Other Experience	Warden, St. Ninian's Institute, Diocese of Dunkeld Taking care of the St Ninian's Institute and its guests Welcoming at the reception and showing guests to their rooms	Oct-Dec 2015
	Waiter/Bartender, Drumoig Golf Hotel Welcoming people at the reception Bartending Waitering	Apr-Aug 2015
	Office Assistant, University of Wroclaw Calling vendors to set up appointments and gather information Post delivery Clerk duties	May-Aug 2013
	Younger Lifeguard, Wroclaw Water Park Taking care of visitors safety and well being	Jan-Aug 2009

Stamina and wellbeing training