Yancho Stefanov
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Personal Profile

Yancho Stefanov is a Software Engineer based in Nottingham with a strong technical skill set, proven problem-solving , teamwork abilities and interpersonal skills. He has extensive experience in **C# and Unity** game development, alongside hands-on knowledge of **C++ and Unreal Engine**. After completing a **Digital Skills Bootcamp**, he gained proficiency in **HTML, CSS, JavaScript, Python,** and **MySQL**. Yancho has developed projects ranging from a memory card game to full-stack **ASP.NET Core** web applications, where he implemented **dependency injection** and **asynchronous programming** to enhance performance and maintainability. Currently pursuing a **BSc in Computing and IT** at Open University, Yancho has demonstrated leadership and innovation in previous roles and actively participates in game jams, while programming a hexapod robot using Python.

Education and IT Training

03/2024-05/2024	**Just IT Training Ltd, London** **Digital Skills Bootcamp: Software Development** A twelve week intensive bootcamp covering the fundamentals of Web and Software development.
02/2023-09/2029	**Open University, Walton Hall in Milton Keynes** **BSc (Honours) Computing and IT**
Core Modules:	Mathematics, Introduction to computing and information technology 1 (completed) both passed with distinction, Technologies in practice, Introduction to computing and information technology 2

Robotics Experience
University Projects in Robotics
Open University, 2024

- **Light Navigation:** Utilized sensors to enable the robot to navigate towards or away from light sources.
- **Motor Control for Steering:** Developed a control system for steering using robot motors to navigate turns. Addressed challenges related to differential wheel speeds, ensuring the robot maintained a straight trajectory despite variations in motor performance.
- **Obstacle Avoidance:** Automated the robot's navigation to move away from objects based on color or temperature detection, effectively preventing collisions.
- **Object Recognition with Machine Learning:** Gained a solid understanding of how robots identify objects using machine learning techniques, including pixel analysis and repetitive learning.

Languages Used in Study:	**HTML, Python,SQL**
	Kapitan Petko Voivoda Professional High School, Dimitrovgrad, Bulgaria
A Level Equivalent:	5(A-C) Including English and Information technologies
	Aleko Konstantinov Primary School, Dimitrovgrad, Bulgaria
GCSE Equivalent:	6(A-C) Grades in Subjects, Including Mathematics and English

IT Skills

Software Development Skills: (C#, C++, JavaScript, Python, Unity, Godot Engine, Unreal Engine, ASP.NET Core, Entity Framework Core, SSMS, Excel Data for cleaning)

Web Technology: (HTML, CSS, MySQL, SQL,T-SQL, SQLite, .NET Core, ASP.NET Core, Entity Framework Core, REST API, Docker,Postman,CRUD)

Core Programming Languages: (C#, C++)

10/2021 – Current Independent Developer

1. Project: Triangle Angle Calculator
   Date: 10/2021 – 12/2022
   Description: Developed a console application in C# .NET that utilizes mathematical formulas to calculate the angles of triangles.
   Tools/Software: C#, .NET Framework, Visual Studio

2. **Project: Platformer Game**
   Date: 02/2022 – 04/2022
   Description: Created a platformer game in C++ using Visual Studio, where players control a character that moves forward, jumps over obstacles, and earns points. Implemented an object pool architecture for obstacle management to improve performance.
   Tools/Software: C++, Visual Studio,raylib

3. **Project: Target Shooter**
   Date: 04/2022 – 07/2022
   Description: Developed a reflex target shooter game where targets pop up, and players must shoot them quickly. The game calculates a reflex score based on reaction time and shot accuracy.
   Tools/Software: C++, Unreal Engine, Visual Studio

4. **Project: Labyrintian**
   Date: 08/2022 – 10/2022
   Description: Created a word adventure game where players control a character using console input to escape from a killer chasing them through various terrains. Players can hide or set traps until they ultimately find a way to escape.
   Tools/Software: C#, .NET Framework, Visual Studio

5. **Project: Tower Defense**
   Date: 11/2022 – 01/2023
   Description: Developed a tower defense game where players place turrets that target and shoot the nearest enemies. The game uses vectors to calculate distances, and the enemy employs a breadth-first search algorithm to find paths. If a path is blocked, events trigger a recalculation of their route. Object pooling is also implemented for efficient enemy management.
   Tools/Software: C#, Unity Engine, Visual Studio

6. **Project: Zombie Shooter**
   Date: 01/2023 – 05/2023
   Description: Created an experimental open-world zombie shooter game set in dark terrain, where players shoot zombies. This project focused on exploring mechanics within a shooter environment and does not have a specific objective.
   Tools/Software: C#, Unity Engine, Visual Studio

7. **Project: Cancer Diagnosis Predictor**
   Date: 04/05/2024 – 05/05/2024
   Description: Developed a machine learning model using TensorFlow to predict cancer diagnoses from a dataset. The project involved data preprocessing, model creation with dense layers, and training for 600 epochs. Evaluated model performance on test data and displayed predictions alongside actual labels.
   Tools/Software: Python, Pandas, TensorFlow, scikit-learn, Visual Studio Code

8. **Project: Music Recommender System**
   Date: Approx. 10/2024
   Description: Developed a music genre classification model using a Decision Tree Classifier. The project involved loading music data, preprocessing features and labels, and splitting the dataset into training and testing sets. The model was trained on the training data and evaluated on test data to calculate accuracy. Utilized Jupyter Notebook for implementation and Anaconda for environment management.
   Tools/Software: Python, Pandas, scikit-learn, Jupyter Notebook, Anaconda d

09/2021-01/2024 **Auto Color, Harmanli, Bulgaria**
Car painter

- Developed and implemented an optimized process, reducing operational time and resource consumption by 50%. Applied analytical skills to identify and address inefficiencies, driving company-wide performance improvements
- Led the introduction of a new process, improving product quality and consistency. Demonstrated both technical skills and flexibility in evaluating and adapting procedures, fostering continuous improvement and operational resilience
- Identified bottlenecks and streamlined team workflows, ensuring timely delivery and sustained productivity. Applied strong problem-solving and time management skills, much like debugging code to enhance efficiency in project execution.

09/2017-03/2020 **Active Nation, Runcorn, UK**
Personal Trainer

- Increased client satisfaction by 30% and retention by 25% through data-driven analysis, personalization, and critical evaluation. Leveraged strong customer service and professional skills to deliver consistent results, similar to analyzing user requirements and tailoring software features for improved engagement.
- Applied data-driven insights and problem-solving techniques to optimize client performance, leading to measurable improvements. This mirrors the use of data analytics and process optimization to enhance efficiency in programming.
- Enhanced team performance by actively listening, sharing best practices, and fostering collaboration, contributing to overall success. This is akin to knowledge sharing in a development team, improving code quality and teamwork through collective problem-solving and code reviews.

Interests and Achievements

- Computing: I am extremely passionate about game development and actively participate in game jams, often working with C# in Unity and C++ in Unreal Engine. Currently, I'm also working on programming a Hexapod using Python I am very Technical, using both Windows and Linux (Raspberry Pi) environments.
- Hobbies: Fitness, Gaming, Traveling, Reading books, Handcraft