

Firtina Ozbalikci

Date of birth: May 1989

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Spoken Languages: Fluent English and Turkish, some Greek and French

WORK EXPERIENCE

- September 2015
(current)
- Software Developer in Sustained Engineering: Unity Technologies**
The role requires having deep understanding of all parts of the Unity engine, in order to improve the stability of the product. The knowledge of software engineering and programming best practices for c++ and c# are being used to specialise in finding the causes of the most difficult bugs, come up with fixes, and create tests in order to prevent them from coming back. Favorite bug that I fixed: an iOS update changed the stack size limit only on older 32-bit devices, which crashed a third party sound library. Major areas: core, physics, graphics, user experience, code readability, maintainability.
- November 2014
to September 2015
- 3D Developer / Technical Consultant: SmartFocus**
Role initially involved creating marketing games and 2D or 3D visualisations using Unity, C# and D3.js. It has gradually expanded to a consultant in order to help out other developers in the company when they needed an extra hand in various projects. A few examples are: implementing an indoor positioning system using real-time sensor data through C++, helping build quick but functional prototypes of web applications using Javascript (ES6, mostly React on NodeJS), and more.
- August 2013
to November 2014
- Software Developer: BillForward**
Full-stack developer. Role involved gathering requirements, participating in design and implementation of projects. These projects varied from back-end engine development (Java, Maven) to single-and multi-page web applications (TypeScript, JS, Node.JS, bower, RequireJS, AngularJS, D3.js; PHP, MYSQL; Ruby on Rails). Deployment of projects onto cloud platforms such as AWS and Azure. Agile development methods, Git, Jira used. In some cases, role included project management.
- July 2012
to August 2012
- Junior Pipeline TD: Cinesite**
Cinesite annual Internship programme. Application process required completing a graphics programming exercise: <http://www.toxicfork.com/portfolio/raytrace>.
- During the six-week internship, my task was to evaluate the NVIDIA Optix ray tracing engine. This involved developing a cross platform standalone application as well as integration into Autodesk Maya. I took basic performance measurements of Optix on sample geometry used in VFX. Tools & technology used include: C++, Qt, CMake, Eclipse, Visual Studio, SVN and CUDA C on Linux & Windows.

TECHNICAL SKILLS

● Software Development

- Over three years of professional experience with C++, C# and Javascript (D3.js, Node.JS, React), in addition to large amounts of hobbyist experience (C++, JS, since 2000) through personal projects.
- Over a year of professional experience with Java, PHP, TypeScript, HTML5, CSS, MYSQL.
- Python and Lisp learned through university. Graphics libraries (DirectX, OpenGL) as well as a few game-specific scripting languages (Lua, UnrealScript) used while doing game prototypes and mods.
- Some assembly (machine-level) languages used in order to debug or patch executables (through OllyDbg, IDA Pro) for the purpose of making cheats and trainers for games.
- Some experience in OpenCL and CUDA.
- Current hobby project is [react-three-renderer \(>750 stars\)](#), a tool that combines [React](#) with [threejs](#) in order to enable an easier and faster workflow to develop 3D web games or experiences.
- Please look at my [GitHub profile \(toxicFork\)](#) for more information regarding recent works. Additionally I have contributed to some open source projects such as "Open Source Virtual Reality".

EDUCATION & QUALIFICATIONS

University	<p>BSc (Hons) Computer Science, University of Bath Graduated with a 2.1 with Honours.</p> <p>Year 3: Networking, safety critical systems, parallel computing as well as artificial intelligence and advanced graphics.</p> <p>Year 2: Advanced design and development, fundamentals of pattern analysis and computation. Fundamentals of computer graphics.</p> <p>Year 1: Computer architecture, system requirements and design, discrete mathematics for computation, and analytical mathematics for applications.</p> <p>Please contact for further information about units.</p>
High School	<p>English School – Nicosia, Cyprus Mathematics, Physics, Biology</p> <p>AS Levels: French</p>

INTERESTS

- ***Psychology***
Especially cognitive psychology. I love to observe how the brain works and how people react to certain situations.
- ***Physics***
Lately I have been studying advanced level physics in my spare time, I'm fascinated by it. Richard Feynman is one of my role models.
- ***Artificial Intelligence***
I believe robots will be able to automate any repetitive or manual tasks to improve our lives, and more. I am studying machine learning and AI ethics in my spare time, so they can serve us better or at least be slightly more friendly.
- ***Entertainment***
Films: Mainly sci fi, psychological thrillers, dramas, biographicals (especially about scientists), and anything in the top 100
Top 3: Matrix, Interstellar, Lord of the Rings
Games: Adventure, RTS, RPG, Action, Indie games, First Person Shooters.
Top 3: Monkey Island, Horizon Zero Dawn, Nox

ADDITIONAL INFORMATION

I enjoy helping others. I have won TUBITAK(Türkiye Bilimsel ve Teknolojik Araştırma Kurumu) Maths Competition 1st place and Sciences Competition 3rd place nationwide awards while attending middle school in North Cyprus. I have been to Gamescom 2011 and 2012 as press. Derren Brown held a photo of me and joked about my name in front of a full theater audience.