

Roberto Sosa Cano

Resumé

CTO and Principal Engineer with more than 18 years of experience in several strong industries like Mobile Videogaming, Multimedia Broadcasting, Aerospace Operations, Broadcasting and Streaming Revenue Protection, and more.

After working with different solutions like Embedded Radar for Surface and Airborne Monitoring (INDRA), IPTV Broadcasting (Nokia), Conditional Access for Broadcast TV (Irdeto), DRM solutions for Over-the-Top Streaming (Verimatrix) or Mobile Free-To-Play Videogaming (SocialPoint and Outfit7) I've broadened my technological knowledge and know what are the key features to make a technological company thrive and succeed in the market.

Blockchain and DeFi picked my interest recently and I've embarked in bringing The Anthill, and their Tokenomics, to the Blockchain so we can bring Financial Freedom and Passive Income to artists all over the world!

Personal Information

Name	Roberto Cano
Location	Spain
LinkedIn	https://www.linkedin.com/in/robertocano/
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POAP	https://app.poap.xyz/scan/robertocano.eth

Professional Skills

Blockchain	Solidity, Hardhat, Web3, ethers.js, Ethereum, Polygon, Arbitrum, BSC
C/C++	18 years of experience using C/C++ in very different environments and platforms
Scripting	Python, Bash, Go
Videogames	Unity, C++ custom engines, Cocos2d-x, OpenGL, Shaders
GNU/Linux	12 years of experience with Linux based systems, buildroot and hard/firm/soft real-time system programming
Versioning	git, GitHub, Bitbucket
Project Management	Trello, Jira, Confluence
Standards	SCSA, PlayReady, DVB MPEG2, Simulcrypt

Languages

Spanish	Native speaker
English	Proficient

Professional Experience

Sept 2021-Current **Founder, [The Solid Chain](#).**

The Solid Chain is a consultancy agency for Blockchain and Web3 related technologies. We offer a varied range of services like Smart Contracts Development, Cryptography Assessment, Technical Leadership or Architectural Design. Always focused on providing the maximum quality and create a relationship of trust with our clients.

As founder I'm in charge of finding the talent that our clients need and growing The Solid Chain brand to make it known in the Blockchain and Web3 space. I also take care of the relationships with our clients and of creating a relationship of trust.

As principal engineer I take care of the design of our solutions, development of the critical path (Smart Contracts), internal auditing and ensuring good practices.

Responsibilities and achievements:

- Helped advance the Roadmap a Creatives DAO project to the point they could start asking for investement
- Worked as advisor for a nascent Educational DAO
- Developed and deployed an auction system used for NFTs

Technologies used:

- Solidity
- Python
- Javascript
- React
- VS Code / Bash / Linux

Mar 2021-Current **Chief Technology Officer, [The Anthill](#).**

The Anthill is the first decentralized (Self-Governed) Global Collective of Creative Minds. Leading the technological development for The Anthill in order to bring the creative power of the community and their Tokenomics to the Blockchain, and to participate in the DeFi ecosystem that is thriving right now.

In charge of mentoring the technology team, analyzing the requirements and designing the architecture for the ANT Token and The Anthill website. Ensuring the proper processes to make sure that the Tokenomics are strong and bullet-proof and setting up the foundations for the future of the community.

Responsibilities and achievements:

- Helped advance 6 months the roadmap by implementing the first Tokenomics system (backend+frontend)
- Mentoring of community members on the technology used in Blockchain
- Architecture and design of the system and communication with the CFO to continue improving the Tokenomics
- Auditing of the smart contracts and reviewing the security of the system

Technologies used:

- Solidity
- React
- VS Code / Bash / Linux

Oct 2020-Mar 2021 **Enjoying Life Manager, *At home*, Barcelona, Spain.**

Work break to explore new challenges and technologies, and relax a bit. In this time I've explored the following spaces:

- Music production and Mixing
- Songwriting
- Story-telling and writing
- Pixel-art design
- Blockchain development

Jan 2019-Sep 2020 **Senior Mobile Game Developer, [Outfit7](#).**

The major Slovenian game developer behind the Talking Tom franchise. Working on the brand new Barcelona studio as one of the initial members. I had the opportunity to not only establish the technology and practices that we use today, but also the culture in the studio. We are currently developing a brand new game based on the Talking Tom franchise, due to be release at the end of 2020.

Responsibilities and achievements:

- Part of a core team of 3 C++ developers working with an in-house engine
- Established the architecture and technologies that we still use today to develop a new game
- Dived into the engine and its tools, spotting problems or things to improve, plus documented a great part of the workflow and good practices to work with the engine
- Expert in the animation tools and integration in the engine
- Developed shaders for our 3D and VFX artists
- Researched a static light baking tool for the engine

Technologies used:

- C++ 11
- In-house engine in C++ and editor
- Visual Studio + Visual Assist

May 2017-Current **Senior Mobile Game Developer, [SocialPoint](#).**

One of the biggest Spanish video-game developers with several successful multiplatform mobile games like Dragon City and Monster Legends. Dragon City is a free-to-play game that's been up and running for 5 years now with millions of users around the world. Recently acquired by Take Two Interactive, SocialPoint is currently growing fast and developing new thrilling titles. An always changing environment that requires sharp skills and effective team work.

Responsibilities and achievements:

- Started working on Dragon City as game developer in a full team of 30 people including developers, QA, artists, game designers, marketing, analytics and producers
- Delivered new features like the new Battle System, Piggy Bank or the Tree of Life story telling feature, which have helped monetize the game and engage new users
- In merely 9 months I've been chosen as Feature Squad Lead. Apart from helping in coding the feature itself the Squad lead must make sure of the high quality of the delivered feature, take care of the software architecture, manage the squad and their assigned tasks and do code reviews to ensure code quality
- As a natural communicative person I make sure that communication flows among all the stakeholders. In a very dynamic environment like mobile games a good communication and organization skills are key to the deliver high quality features on time

Technologies used:

- C++ 11
- Cocos2d-x
- In-house Cocos2d editor
- XCode
- Network analyzers (Charles, WireShark)

July 2014-April 2017 **Senior Mobile Engineer, [Inside Secure Amsterdam B.V.](#)**

NFC and security related company with headquarters in France and several offices around the world. Today it also includes DRM technologies for mobile devices, tablets and a wide range of linux boxes. The DRM Fusion Agent is a downloadable DRM solution that can be integrated into any mobile application by application developers to provide video streaming, decryption and playback. Multiplatform software running on Android x86/ARM, iOS, Windows and Linux. In charge of the current Trusted Execution Environment architecture in the company.

Responsibilities and achievements:

- Small group of core developers working on C/C++ in a multiplatform DRM solution
- After only 2 months of work I was able to create a demo that was presented at IBC 2014
- Developed POC of Secure Content Path with ARM as a partner to present at IBC 2015 and CES 2015
- Expertise in TEE and SCP integrations for different vendors

Technologies used:

- C/C++
- Java
- Android SDK/NDK
- HLS, SS, MPEG-DASH, CFF
- Microsoft PlayReady, SCSA

Aug 2011-June 2014 **Senior Embedded Engineer, [Irdeto B.V.](#)**

CA systems company with headquarters in Beijing and Hoofddorp belonging to MIH, a South African holding. Working for the Broadcast CA team implementing cutting edge audio and video session based watermarking solutions. The system made use of Linux and QNX for firm real-time scrambling and audio, SD video and HD video watermarking. The product allowed the customers to identify the exact source (smartcard) of a media content being rebroadcasted or uploaded to internet. This solution was implemented in the headend.

Responsibilities and achievements:

- SCRUM managed project implementing pair programming, continuous integration and code review processes
- Continuous performance improvement of legacy software to meet product requirements
- Implemented real time audio watermarking scrambler with TS over ASI and UDP I/O over QNX 6.5.0
- Implemented real time MPEG2 video watermarking embedder with UDP I/O over Ubuntu server
- Successfully led continuous integration initiative in the team using Jenkins
- Successfully led Python DVB tools initiative to ease development and testing processes
- Written custom FFmpeg video processing filter that led to start conversations with a major movie producer
- Key role in a couple of customer support cases that were crucial for the company
- Top 10% performer for FY 2013

Technologies used:

- C/C++
- Python
- GDB, Valgrind

2010-Aug 2011 **Software Architect and Senior Embedded Engineer**, [Luknia](#).

Startup project on multiplatform IPTV middleware aimed to provide interactive advertisement and user participation. Included RAD tool for 3rd parties to develop STB apps.

Responsibilities and achievements:

- Design and development of a completely new middleware in C++ based on GStreamer
- Investor and customer interaction.
- Ported 3rd party engine to OpenVG (www.noesisengine.com)

Technology used:

- C++
- Linux, Linux kernel, drivers, GStreamer
- OpenVG, OpenGL

2006-2010 **IPTV and Middleware Engineer**, [Alcatel-Lucent](#).

MiViewTV IPTV STB browser-based middleware used in platforms like Imagenio from Telefónica in Spain. Deployed in several countries: Spain, Czech Republic, Brazil and more. Design and implementation of interactive advertising, EEPG, PVR Recommender, Fast Channel Change, Flash Lite based GUI and browser-based GUI using Mozilla XPCOM extensions. Integrated with several SoCs like Sigma, ST or Intel.

Responsibilities and achievements:

- Lead developer in a team of 6 core developers
- Successfully ported and optimized Flash Lite 3 engine from Adobe to the Linux platform
- Successfully released new major version MiViewTV 6.0
- Responsible for coaching a new team at the new Alcatel-Lucent offices in Chennai (India)

Technology used:

- C/C++
- Linux, Mozilla XPCOM, Flash Lite 3

2004-2006 **Junior Radar Engineer**, [Indra Systems](#).

First Mode S radar developed in the company. Based on a Thales V4G4 board running VxWorks. Implemented custom drivers to interface with custom cards and equipment for RF, signal processing, antenna control and user GUI.

Responsibilities and achievements:

- Design and implementation of the signal processing software
- Real-time data processing in redundant configuration
- Successfully deployed a new primary surface surveillance radar in Palma de Mallorca's airport

Technology used:

- C/C++
- VxWorks, real-time OS

Conferences

2022 **ETHBarcelona 2022**, Barcelona, Spain.

ETHAmsterdam/DevCon 2022, Amsterdam, Netherlands.

2016 **ScreenShake 2016**, Antwerp, Belgium.

GDC Europe 2016, Cologne, Germany.

Unite Europe 2016, *Training Day*, Amsterdam, Netherlands.

2014-2015 **O'Reilly OSCON 2015**, Amsterdam, Netherlands.

GOTO Conference 2014 and 2015, Amsterdam, Netherlands.

Certificates

- 2022 [Proof of Attendance Protocol](#).
- 2022 [Codility Jurassic Code 2022 Challenge](#).
- 2016 [Codility Titanium 2016 Challenge](#).

GameJams

- 2019 [Ludum Dare December 2018](#), Participated remotely.
- 2017 [Ludum Dare July 2017](#), Participated remotely.

Education

- 1998–2002 **Master of Science in Computer Science**, *Universidad Autónoma de Madrid*, Madrid, Spain.