I am a Senior Software Engineer with over 30 years of experience and a passion for technology. I have worked in a variety of industries and fields such as education, entertainment, telecommunications and payment processing including the architecture and implementation of complex PCI-DSS compliant systems.

Electronics has always been a hobby for me and, since I was a teenager, I've been soldering something in my spare time. This gave me a chance on various occasions, to get professionally involved in designing proof-of-concept/early prototype devices.

I am currently based in Poland and able to take on contractor roles across a range of positions and durations, normally fully remote with occasional on-site visits.

Recent experience	Laravel / PHP / Redis / MySQL (AWS RDS)
	Serverless / Node.js (AWS Lambda) / DynamoDB
	AWS (CloudFront, Route53, CodeBuild, FireHose)
	SpringBoot/Kotlin

Other C#, C/C++, KiCad, Arduino, Flutter

Employment History

2020 - Current

Senior Software Developer. PHP, Laravel, Node.js, Serverless, DynamoDB

Designed and built APIs to provide in-car transaction services for fuel, EV-charging, and road tolls payments.

Updated a PCI-DSS compliant credit card storage and charge system to provide support for SCA (3DS) and comply with regulatory requirements to initiate payments as MIT.

Designed and took to production an electronics hobbyists' kit to build a Single Board Computer based on an old fashioned 1-bit ICU.

https://github.com/nicolacimmino/PLC-14500

2019 Sabbatical

Spent the year traveling while writing a book about my experiences in Japan and its culture.

https://www.amazon.de/-/en/N-Cimmino/dp/1099306345

2015 to 2019 Parkopedia LTD (UK)

Senior Software Developer. PHP, Laravel, Node.js, Serverless, DynamoDB

Developed the backend for a parking booking and payment system. Lead the technical effort to achieve PCI-DSS compliance and to develop a secure environment for credit cards storage and payment processing.

2013 to 2015 Anite OY (Finland)

Senior Software Architect and Software Team Leader. C#, Matlab

Developed an application that analyzes and reproduces radio channel propagation conditions used in the testing of telecommunication devices.

2004 to 2012 Elektrobit OY (Finland)

Senior Software Architect, System Designer. C#, C++, Matlab

Developed various software components of a radio channel emulator platform used in the testing of telecommunication devices.

1999 to 2004 WCL OY (Finland)

Project Manager, Lead Software Developer. Java, C++, VB, ASP

Delivered SMS enabled applications to several UK and Finnish companies, such as SMS/Teletext games, auctions bidding systems, sport alerts, ringtones and operator logos delivery and other SMS based services.

1998 - 1999 Self employed (Italy)

Consultant. VB, Assembly.

Consulted as a freelance in both hardware and software design.

1995 - 1997 DB Elettronica e Telecomunicazioni SPA (Italy)

Designed mechanical parts and PCBs for radio and TV broadcast transmitters.

1994 - 1995 SIGMA (Italy)

Performed on-site assistance to PCs and other hardware.

1993 - 1994 START Multimedia (Padova - Italy)

Developed informative software and products catalogs for Windows in Visual Basic 3.

1991 - 1993 Videopress (Padova - Italy)

Developed educational software on Commodore Amiga in AMOS.

Current Personal Projects

I engage in a lot of different personal projects. You can find most of my work in my GitHub (<u>https://github.com/nicolacimmino</u>). If you are looking for specific skills proof please ask as there is a lot of code at various stages of development in there. Couple of projects I am particularly proud of:

PLC14500

(https://github.com/nicolacimmino/PLC-14500)

A retro-style trainer board based on the Motorola MC14500, a 1-bit ICU popular in the past in PLCs. I developed this as a showcase project for my portfolio. The project is OSHW certified, so anyone can build one. I also made it available as a kit to assemble on Tindie. I'm using this project to showcase my electronics design and documentation abilities, KiCad PCB design. To provide a toolchain for the board I developed an assembler in Dart, and a rudimentary board simulator in Flutter which is heavily WIP.

Frameworks Testing

https://github.com/nicolacimmino/FrameworksTesting/tree/master/SpringBootKotlin

I have recently started to dip my toes in Spring Boot/Kotlin in preparation to work with a new client. To get familiar with the framework I built a hypothetical service providing user authentication and APIs to create and retrieve user assets (bank accounts). The application is split into microservices and demonstrates, among other things, how to build an API Gateway, allow service discovery with Eureka, persist data on MongoDB, provide centralized configuration with Spring Cloud Config, and messaging between microservices with RabbitMQ.

Degrees and Courses

Industrial Electronics Degree.

ITIS F.Severi (Padova, Italy), degree of 57/60 in July 1994.

The school gives a practical knowledge of electronics in the industry spanning from circuit design aspects to the actual fabrication technologies. Oriented to both digital and analog electronics. Related subjects like mathematics, chemistry and physics are also part of the curriculum.

LTE Physical Layer course, Radio Propagation and Radio Channel Modeling course, Windows Drivers Development (WDK) course, Tick the code, Golang seminar.