

# Nico Orrù

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<http://itadinanta.net>

## Overview

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### Profile

Principal programmer, versatile polyglot software development veteran, specialized in **networked console game servers**.

### Objectives

My current interests lie mainly in engineering reliable, scalable, distributed systems of heterogeneous nature.

My preferred domain includes networked games and digital entertainment, in which I can play technical roles ranging from the likes of hands-on software engineer, programmer, problem solver, up to architect, project and team leader, as required by the project at hand.

## Published games

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- **DRIVECLUB VR** – PSVR – principal programmer
- **DRIVECLUB Bikes** – PS4/PSN – online server lead
- **DRIVECLUB PS+ Edition** – PS4/PSN – online server lead
- **DRIVECLUB** – PS4 – server programming
- **SmartAs** – PSVITA – online leaderboards, server infrastructure – Metacritic score 72%
- **Wipeout 2048** – PSVITA “launch” title – online leaderboards, server programming, server maintenance – Metacritic score 79%
- **MotorStorm Apocalypse** – PS3 – client/server additional programming, networking
- **MotorStorm Arctic Edge** – PSP – online server lead – Metacritic score 79%
- **Wipeout HD Fury DLC** – PS3/PSN – online game lobby, online leaderboards – Metacritic score 89%.
- **MotorStorm Pacific Rift** – PS3 – additional server programming – Metacritic score 82%, featuring MotorStorm community portal, [vip.motorstorm.com](http://vip.motorstorm.com) – project technical lead.
- **Wipeout HD** – PS3/PSN – online game lobby, online web community, online leaderboards – Metacritic score 87%
- **Wipeout Pulse** – PSP – online game lobby, online in-game community, online web community – Metacritic score 82%
- **Formula One Championship Edition** – PS3 launch title – online game lobby and front-end, online in-game community, online leaderboards, internal build tools – Metacritic score 74%
- **F1 06** – PS2/PSP – internal build tools, unreleased online services
- **Wipeout Pure** – PSP launch title – plug-ins, DLC infrastructure, DLC playstation.com integration – Metacritic score 88%
- **Formula 1 2005**. Areas: online, internal testing tools

## Knowledge

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### Programming and scripting languages

- **Currently:** Java, Scala, C++, SQL (Oracle, MySQL, PostgreSQL, other), bash
- Occasionally: C#, Elm, F#, Rust, Lua, Ruby, PowerShell, Erlang, C, JavaScript/jQuery/HTML/DOM/CSS
- Historically: Python, Pascal/Turbo Pascal/Delphi, Assembly (80x86, Z80, 6510, PowerPC), PHP, Perl, BASIC/Visual BASIC/VBA dialects, MATLAB, Emacs LISP, FORTRAN, XSLT, various DSLs

### Development tools and methodologies

- TDD, BDD, Agile (**SCRUM, Kanban and Lean** variants),
- CI with **Jenkins/Hudson**, Travis CI, **Sbt**, Ant, **Maven**, Nexus, Bintray, Ivy, CruiseControl, SCEE BuildServer, SCEE Imogen
- OOP, OOD, FP, Actor model, **Guava, Akka**, OTP
- **Git, Perforce**, Subversion, CVS, AccuRev, AlienBrain, Mercurial
- **Amazon AWS, OpenStack/Eucalyptus**, Docker, Google AppEngine
- **laC, Chef**, automated provisioning and configuration, VirtualBox/Vagrant, VMWare, FreeVSD
- Cross platform development (Console/PC, Linux/Windows)
- GridGain, JGroups

- **Eclipse** JDT, Scala IDE, CDT, RustDT, ErlIDE, Emacs, **Visual Studio**/ReSharper/Visual Assist, experience of JetBrains IDEA, NetBeans IDE, Xcode, MonoDevelop, Delphi/Borland RAD tools, Unix build tools, Android ADK
- Apache Cassandra, CouchDB, SimpleDB, NoSQL
- Tomcat, Jetty, Netty, JBoss AS, Jetspeed2, Spray, Magnolia CRM, Google Protocol Buffers, Thrift, JMX, SNMP
- Apache2, Postfix, Sendmail, Qmail, MySQL, freeRadius, iptables, BIND, other
- RabbitMQ/AMQP, JMS
- OR mapping tools (Hibernate, iBatis, EJB, JDO)
- SONY network technology: PSN, SCE-RT, Medius, DME, SVO, DTE, ActiveCommunity, OTG-S/C3, OTG Telemetry
- Automated test tools (SCE DTE)
- Cross-team on-site/off-site coordinated development and deployment across multiple timezones

## Environments

- **Linux** (Ubuntu/Debian, CentOS/RedHat/FC, other), **Unix** (Sony/News OS, Solaris, SysV, HP-UX, AIX)
- **Microsoft Windows**
- **Sony console platforms** (PS4, PSVITA, PS3, PSP, PS2)
- Apple Mac OS X
- Android, Other embedded systems (Nortel, Cisco)

## Personal highlights

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- Open-minded, flexible and fast at learning
- Extremely goal and outcome oriented
- Tenacious problem solver
- Open and honest communicator
- Enthusiast to take part in challenging projects
- Creative and willing to share ideas and proposals

## Other interests and experience

- Team interactions, methodologies and processes
- Social networking and communities
- Real-time 2D/3D-graphics
- Audio and DSP
- Mixed Windows-Linux/UNIX IP-based networks management
- Civil engineering/CAD environment and water resources management

## History

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### 2016-present

**Principal programmer** at Sony Interactive Entertainment Worldwide Studios Immersive Technology Group (Liverpool, UK)

- Research on Social VR technology and applications
- Maintenance and development of the Driveclub/Driveclub VR franchise servers

**Released games:**

- **DRIVECLUB VR**

### 2014-2016

**Online Server Lead** at Sony Computer Entertainment Europe Evolution Studios (Runcorn, UK), terminated due to Evolution Studios closure.

- Plan, design and develop server strategy and platform
- Facilitate and organize co-development of online services with SCEE internal teams and Third parties
- Bug fix, maintain and improve Driveclub/Driveclub PS+ edition servers

**Released games:**

- **DRIVECLUB Bikes, DRIVECLUB PS+ Edition**

### 2012-2014

**Principal Online Server Programmer** at Sony Computer Entertainment Europe Evolution Studios (Runcorn, UK)

- Develop the studio's custom game server platform, Evolution Game Server for Driveclub

#### Released games:

- DRIVECLUB

#### 2012

**Lead Server Programmer** at Sony Computer Entertainment Europe Studio Liverpool (UK). Terminated due to Liverpool Studio closure.

- Responsibility for all strategy, design and R&D of server/back-end technology.
- Wipeout 2048 servers maintenance, troubleshooting.

#### 2010-2012

**Senior Server Programmer** at Sony Computer Entertainment Europe Online Technology Group (London, UK)

- Internal SONY studios expert advice as consultant
- Develop customized server-side solutions for internal studio projects
- Research and develop reusable components and services for integration within multiple game titles
- Facilitate technology and knowledge sharing
- Evaluate, adopt and integrate third party technologies
- Advocate adoption of industry best practices in an agile environment
- Support productionisation and post-launch stages of Online games

#### Released games:

- **Wipeout 2048**, Studio Liverpool, **SmartAs**, XDEV/Climax.

#### 2004-2010

**Senior Programmer** at Sony Computer Entertainment Europe Studio Liverpool (UK) with a specialization as a **Server Programmer** (80% server side, 20% client side)

- Evaluate, adopt and integrate third party technologies and technology prototypes
- Coordinate the SCEE Northwest Studio Server Group reporting to the SCEE Northwest Studio Group Online Lead
- Mentor junior staff
- Act as the deputy Online Lead in the lead's absence
- Act as the point of contact between game teams and server deployment, game integration and production teams off-site.
- Offer consultancy and support on all aspects of online game development to internal and external development teams
- Develop and dimension reliable and scalable systems for production-level game servers, from design to production.
- Develop client/server technology for PS3 and PSP games.
- Develop game community websites for the SCEE Northwest Studio Group franchises (MotorStorm, Wipeout) as the technology lead

#### Released games:

- **MotorStorm Arctic Edge**, **Wipeout HD Fury DLC**, **MotorStorm Pacific Rift**, [vip.motorstorm.com](http://vip.motorstorm.com). **Wipeout HD**, **Wipeout Pulse**, [www.wipeout-game.com](http://www.wipeout-game.com), **Formula One 2006/Formula One Championship Edition**, **Wipeout Pure**, **Formula 1 2005**.

#### 2004

**Lead developer** at OptiOne S.r.l. (Villacidro, Italy). Responsible for the development of OptiCAD, a CAD/CAM/optimisation software suite for specialized glass-cutting machines.

#### 2001-2003

Experienced analyst, developer, system and network manager at Energit (Cagliari, Italy) during start-up phase. E-commerce, customer care, CRM, product and service R&D and network/server administration, hosting, domain registration, TCP/IP networking, 24/7 first and second line emergency support, troubleshooting.

#### Notable products:

- Energit Areaserver – domain registration, virtual and dedicated hosting, Energit Virtual Power Plant

#### 1998-2000

Founder at DOT S.r.l. (Cagliari, Italy). Engineering, environmental and water resources, graphics/CAD. Lead developer for GridProcessor; CAD/data operator and programmer on engineering-related projects

- Network and system manager
- Web programmer and web designer, ISP services
- Engineering applications, water resource management applications. Lead developer for the "Backrain" self-funded

software project to extract synthetic river networks from a DEM

- Computer science instructor for 6th and 7th grade student classes

## 1997

- Compulsory civilian service (in substitution of military service) at the Juvenile Prison of Quartucciu (Italy), and at the Juvenile Justice Centre of Sardinia. Administrative assistant and office automation specialist.
- Developer of Profili Win, a CAD application tailored for aqueduct and water pipe projects design (part-time)
- Database application for maintenance of aluminium production tools, for Alcoa (part-time)

## 1993-1996

**Programmer** at "Ente Autonomo del Flumendosa" (water resources management, engineering, scientific, physics), at the New Survey about the Surface Hydrology of Sardinia). Also freelance developer of web sites and database applications for several small firms

## 1992

High school diploma specialising in Computer Science.

## 1990-1991

Freelance junior analyst programmer, part-time. Developed bespoke MS-DOS application for the special delivery of clothes, developed bespoke MS-DOS application for aluminium cut optimization.

# Education

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## 2000

**Diploma Universitario in Informatica** from the University of Cagliari, a three-years university-level degree in Computer Science with a final mark of **70/70 cum laude**.

## 1992

**Diploma di Maturità Tecnica Industriale specializzazione Informatica** obtained from Istituto Tecnico Industriale "Dionigi Scano" (five years technical high school, specialisation in Computer Science) with a mark of **60/60** in the final exam.

# Personal

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## Nationality

Dual national British and Italian. Born in Cagliari (Sardinia, Italy), naturalised British in 2013.

## Languages

- Italian: fluent
- English: fluent
- Spanish: basic
- Japanese: rudimentary

## Availability

Three months notice required by the current contract, early release may be negotiable according to project status.

## Relocation/commuting

Ideally North West of England, max 45 minutes commute from Liverpool city centre. I may be consider permanent relocation within the UK and within the EU for the "right project" and the "right place".

## Driving license

UK (EU) full driving license.

## Extra-curricular interests

Videogames, technology, international politics, photography, travelling, animation and anime, writing and poetry, playing piano and keyboards, martial arts, baroque music, books and literature, trying new things.

*References will be provided on demand.*

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