# Antonio Papa

## **Personal Summary**

I am a software engineer with a strong academic background and with valuable experience in the financial industry. Currently, I am looking for a software developer opportunity which will allow me to work alongside an expert team of developers. This will create a synergy of driving my career progression to more senior roles in the future and advancing the interests of my employer.

#### Personal Information

Address 41 Connaught Rd, London NW10 9AJ

Email eng.antonio.papa@gmail.com

Telephone (+44) 7754307736 Language Italian, English

#### Education

February 2014 | Master's degree in Computer Science

Score: 110/110 with honors (U.K. Grade Equivalent: 1st)

Organisation | Tor Vergata, Rome University, Italy

Thesis project | Data Transfers between User and Kernel Memory via Dedicated DMA Engine

Main subjects | Computer Security, Distributed Systems, Advanced Linux, System Embedded and Real Time,

Mobile computing

February 2009 | Bachelor's degree in Computer Science

Organisation | Tor Vergata, Rome University, Italy

Thesis project | Development of an Epidemic Protocol for Pure Decentralized P2P System

Main subjects | Foundations of Computer Science 1 & 2, Algorithms and Data Structures, Object Oriented Pro-

gramming, Computers Architectures 1 & 2, Operating Systems

# **Projects**

July 2017 - Present AVAPI

GitHub • C++ version: https://github.com/AvapiDotNet/AvapiCpp

 $\bullet$ . NET version: https://github.com/AvapiDotNet/Avapi

Nuget (https://www.nuget.org/packages/Avapi/)

Description | Co-creator and maintainer of Avapi. This library is a C++ and .NET Core/Standard wrapper

allowing software developers to interface towards Alpha Vantage Service (Market Data for free!). The code and the documentation related to this library has been auto-generated by tools I have

developed.

Tools C++, Jira Cloud, Github, VS Code, AWS CodeBuild, AWS CodePipeline, AWS S3, nuget, .NET

Core.

2014 Data Transfers between User and Kernel Memory via Dedicated DMA Engine

GitHub https://github.com/engantoniopapa/Dmacftu

Description | Kernel extension that adds to original kernel the functionalities and information needed to manage

a DMA engine that performs memory-to-memory transfers. The extension provides an interface for DMA transfers and a set of policies used to manage the DMA channels. One of these policies can also be used to manage the transfers of real-time applications. It assigns the bus of the DMA engine, for a certain time interval exclusively, to the channels that handle high-priority tasks. The system that uses this extension can improve performance related to copy memory operation and can reduce the cache pollution by up to 80%. The entire project exceeds 10K lines of code and was developed in C language.

2009 Epidemic Protocol for Pure Decentralized P2P System

GitHub https://github.com/engantoniopapa/2Rounds

Description Epidemic protocol that limits the data flooding produced by membership information and requests for resources localisation. This protocol provides a set of messages and routing rules that allows peers to communicate in a completely decentralized system. The network applications that use this protocol can improve network coverage, i.e. in a network with 500K nodes the network coverage

developed in C language.

### Work Experience

12/2018 to 01/2018 | QA/Support Engineer, Celoxica Ltd (20 Craven Terrace, London W2 3QH)

• Design and implementation of new test cases regarding new financial feeds or messages (C language)

is about 90% (with Gnutella protocol 20%), and control data flooding. The entire project was

- Design and implementation of risk component in the QA-TestSuite (C++ language)
- Client Support on the Market Data and Order Entry products
- MiFIDII Conformance Test for the European Exchange (LSE, BIT, TURQUOISE, OSLO, etc)
- UDP/TCP traffic analysis and isolation for interesting sample to integrate as part of test cases.

09/2016 to 12/2017 05/2016 to 09/2016 Barista, Lexington Catering Ltd (1 Old Jewry, London EC2R 8DN)

Barista, Sweet N Savoury (237 Kilburn High Rd, London NW6 7JN)

# Computer Skills

Programming Language | C, C++, C#

Kernel Hacking • Knowledge of kernel Linux

• Development of device drivers

Software Code::blocks, VS Code, Wireshark, Vi(M)

Operating System | GNU/Linux, Windows(XP, Vista, 7)

Office Automation | OpenOffice, Microsoft Office, LaTEX, Gnuplot

Version Control | Git, GitHub, Subversion

#### Reference

References and additional information will be gladly provided upon request.