

# Kostas Rontogiannis

COMPUTER ENGINEER

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## Summary

I am a Software Engineer, specializing in the .NET framework, C# and F#. I am interested in programming languages, especially functional programming, cloud computing and high performance programming.

## Education

### School of Electrical and Computer Engineering

*Athens, Greece*

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

*Sep 2007 - Jun 2015*

- 5-year studies - equivalent to Master (300 ECTS)
- **Direction of specialization** Information technology
  - Major** Computer Software, Computer Systems
  - Minor** Communications and Computer Networks
  - GPA** 7.76/10.00
- **Diploma Thesis** *Implementation of MBrace for large-scale cloud computing*  
Supervisors:
  - Nikolaos Papaspyrou, Associate Professor NTUA.
  - Kostas Rontogiannis, Associate Professor NTUA.
  - Don Syme, Principal Researcher, Microsoft Research, Cambridge.
- Lab assistant in the 'Introduction to computer programming' course.

## Experience

### Hellenic Army Support Center

*Athens, Greece*

SOFTWARE ANALYST - COMPUTER PROGRAMMER (COMPULSORY MILITARY SERVICE)

*Sep 2015 - June 2016*

- Maintenance, optimization, design and implementation of the Hellenic Army Personnel Management System.
- Code base restructuring.
- Installation and maintenance of Linux servers in a production environment.
- Administration of internal management tools.
- Documentation of all the above and training of new staff.
- Technologies used: Java, Swing, AWT, Oracle RDBMS, SVN, Trac

### Nessos Information Technologies S.A.

*Athens, Greece*

SOFTWARE ENGINEER

*Oct 2012 - Sep 2015, Sep 2016 - Present*

- Maintenance, testing and performance tuning of the cloud computing framework called MBrace.
- Extended MBrace with Microsoft Azure Storage bindings.
- Design and implementation of the MBrace.Azure runtime : a complete implementation of the MBrace core components on top of the native Azure services, that is now the most popular MBrace runtime.
- Backend developer for open source libraries and business applications.

### Microsoft Corporation

*Athens, Greece*

MICROSOFT STUDENT PARTNER

*Sep 2010 - Sep 2014*

- Co-founded the first .NET related community (StudentGuru NTUA) in National Technical University of Athens.
- Organizing workshops and seminars, giving several talks related to Microsoft technologies, technical blogging on StudentGuru.

## Selected Projects

### MBrace

NESSOS INFORMATION TECHNOLOGIES S.A.

MBrace is a standalone cloud computing framework written in F#, able to execute arbitrary code send from a REPL or a standalone applications, designed to run on-premises but also with Microsoft Azure Storage support.

[.NET, F#, Azure Storage services, Team Foundation Server](#)

## MBrace.Azure

NESSOS INFORMATION TECHNOLOGIES S.A. - OPEN SOURCE

MBrace.Azure is an open source scalable cloud computing framework, based on the MBrace principles. Written from scratch on top of the native Azure services like Service Bus and Azure Storage, MBrace.Azure is the most popular MBrace runtime implementation.

[.NET](#), [F#](#), [C#](#), [Azure Storage](#), [Service Bus](#), [Git](#)

## Digi8

NESSOS INFORMATION TECHNOLOGIES S.A.

Digi8 is a web based solution for delivering TV ads to Greek broadcasters.

[.NET](#), [C#](#), [ASP.NET MVC/Web API](#), [Javascript](#), [AngularJS](#), [Git](#)

## LinqOptimizer

NESSOS INFORMATION TECHNOLOGIES S.A. - OPEN SOURCE

LinqOptimizer is an open source library that acts as a runtime compiler and optimizer for Linq expressions. LinqOptimizer is able to transform Linq expressions to optimized for loops and achieve speedups up to 15x.

[.NET](#), [F#](#), [C#](#)

## GpuLinq

NESSOS INFORMATION TECHNOLOGIES S.A. - OPEN SOURCE

GPULinq is an open source library that optimizes and compiles Linq expression trees to efficient OpenCL kernels and run them on the GPU.

[.NET](#), [F#](#), [C#](#), [OpenCL](#)

## IDE7

PERSONAL PROJECT

IDE7 is a Windows Phone 7.5 application, enabling users to write their own programs on a mobile device and execute them using the ideone.com service. IDE7 offered multilanguage support, a code editor with services like syntax highlighting, bracket matching, etc, as well as a file management system.

[C#](#), [Azure Web Services](#), [Silverlight](#), [Windows Phone](#), [Mercurial](#)

## Looper

PERSONAL PROJECT - OPEN SOURCE

Looper is a C# Roslyn based Analyzer and Code Fix provider meant to transform Linq patterns to efficient loops. Looper is open source and under development.

[C#](#), [F#](#), [Roslyn](#)

## Other

### MBrace: cloud computing with monads

[PLOS '13](#)

PUBLICATION

Nov 2013

Jan Dzik, Nick Palladinos, Konstantinos Rontogiannis, Eirik Tsarpalis, Nikolaos Vathis

In pre-proceedings of PLOS '13 Seventh Workshop on Programming Languages and Operating Systems Article No. 7

### Windows Phone 7.5 Hackathon

[Athens, Greece](#)

AWARD - TOP 5 WINNERS

Feb 2012

Co-developed the app *Athens Life* and got awarded a Nokia Lumia device, out of 35 contestants.

### Athens F# User Group

[Athens, Greece](#)

MEMBER

Dec 2013 - Feb 2015

Organizer and speaker at the Athens F# User Group.

## Skills

### Programming languages

C#, F#  
C, Typescript, OCaml  
Java, Ruby

### Frameworks & Software stacks

.NET/.NET Core, Microsoft Azure  
WPF, Silverlight, ASP.NET  
Roslyn, Monogame (XNA)

EXPERT  
ADVANCED  
INTERMEDIATE

### Tools

Git, Team Foundation Server  
Visual Studio  
SQL Server  
Microsoft Windows, Linux

### Languages

Greek (Native), English (Fluent)