

# Vasilis Gerakaris

## Curriculum Vitæ

### EDUCATION

---

- 2015–2016 (expected) MSc in COMPUTER SCIENCE  
**University of Edinburgh**  
Specialist Area: Cyber Security & Privacy  
Thesis: “[Design & Implementation of a Password Strength Meter for Partial Passwords](#)”  
Advisor: Prof. [David ASPINALL](#)  
GPA (*Expected*): Distinction
- 2008–2015 Diploma of [Electrical & Computer Engineering](#) in INFORMATION TECHNOLOGY (MEng equivalent)  
**National Technical University of Athens**  
Thesis: “[Design and Implementation of a File Syncing Mechanism for a Distributed Storage System of a Cloud Computing Environment](#)” - [\[Presentation\]](#)  
Advisor: Prof. [Nectarios KOZIRIS](#)  
GPA: 7.95/10, *Upper Second Class Honours (2:1)*

### RESEARCH INTERESTS

---

Cloud Computing, Distributed Systems, Software & Network Security

### NOTABLE COURSE PROJECTS

---

**Extreme Computing** (University of Edinburgh - MSc)  
Used the Map-Reduce paradigm on an [Apache Hadoop](#) cluster to perform distributed computations of several tasks.

**Secure Programming** (University of Edinburgh - MSc)  
Performed buffer overflow, SQL-injection, CSRF, XSS and other attacks on various vulnerable setups.

**Applied Databases** (University of Edinburgh - MSc)  
Combined MySQL, Java and [Apache Lucene](#) to build a database with string and spatial searching capabilities.

**Software Engineering** (NTUA - 9<sup>th</sup> semester)  
Designed and implemented features in an existing [SIP](#) Java project measuring over 10.000 source lines of code.

**Operating Systems Laboratory** (NTUA - 8<sup>th</sup> semester)  
Co-Developed a Linux device driver for a wireless sensor network. Implemented a modular and customisable system call on a Linux kernel.

**Database Systems** (NTUA - 7<sup>th</sup> semester)  
Co-Developed a website on a LAMP stack using PHP and MySQL, following the MVC architectural pattern. Contributed to the development of a MySQL administration web application in PHP.

## TEACHING EXPERIENCE

---

FEB 2012 - SEP 2015

National Technical University of Athens

*Teaching Assistant*

### **Introduction to Programming** (1<sup>st</sup> semester)

Winter semesters 2012–2013, 2013–2014, 2014–2015

Guided students through the computer lab part of the course. Explained fundamental programming concepts in [PaZcal](#) (an educational subset of the C programming language) and offered guidelines for proper coding practices and style. Wrote and maintained the [Vim syntax highlighter](#) used on the course server.

### **Programming Techniques** (2<sup>nd</sup> semester)

Spring semesters 2012, 2013, 2014, 2015

Guided students through the computer lab part of the course. Explained programming concepts in C and C++, as well as using an IDE (Eclipse, Dev-C++) as part of a workflow. Prepared and gave presentations and live demos of programs to better demonstrate the use of several functions and data structures. Examined and graded students' programs based on correctness, performance and presentation.

## AWARDS

---

2008 **Government-subsidised laptop**

(Awarded to the top 25% first-year students enrolled in the university)

2002–2008 **Annual Academic Excellence Award**

(Awarded to students that achieve a GPA higher than 18.5/20 each year)

## LANGUAGES

---

|          |                    |                                   |
|----------|--------------------|-----------------------------------|
| GREEK:   | Native Proficiency | Mother Tongue                     |
| ENGLISH: | Proficiency        | C2 - CPE, ECPE, IELTS 8.5 Overall |
| FRENCH:  | Intermediate       | B1 - DELF 1                       |

## COMPUTER SKILLS

---

|                                 |  |
|---------------------------------|--|
| OS                              | MacOS, LINUX, Microsoft WINDOWS  |
| Programming Languages:          | Python, C/C++, Java, Ruby, ML/OCAML, BASH, PHP, HTML, JavaScript, others |
| Software Development Platforms: | Eclipse, NetBeans, Xcode, IntelliJ IDEA, Visual Studio                   |
| Typewriting /Typesetting:       | ℒ <sub>A</sub> T <sub>E</sub> X, LibreOffice, Microsoft Office, iWork    |
| Version Control:                | <a href="#">Git</a> , <a href="#">Mercurial</a>                          |
| Computing Tools:                | MATLAB, <a href="#">SAGE</a> , Mathematica                               |
| Networking:                     | Wireshark, Nagios, <a href="#">Quagga</a>                                |

## EXTRACURRICULAR ACTIVITIES

---

2012-2015 Moderator on the [official forum](#) of the School of Electrical and Computer Engineering.

## REFERENCES

---

Professor [David Aspinall](#)  
University of Edinburgh  
[david.aspinall@ed.ac.uk](mailto:david.aspinall@ed.ac.uk)

Professor [Nectarios Koziris](#)  
National Technical University of Athens  
[nkoziris@cslab.ece.ntua.gr](mailto:nkoziris@cslab.ece.ntua.gr)

Doctor [Vangelis Koukis](#)  
Founder & CTO at [Arrikto](#)  
[vkoukis@gmail.com](mailto:vkoukis@gmail.com)