Georgios "George" Balatsouras

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EDUCATION

Doctor of Philosophy – PhD, Static Program Analysis   2012 – 2017
Ethnikon kai Kapodistriakon Panepistimion Athinon / University of Athens
Department of Informatics & Telecommunications
Advisor: Prof. Yannis Smaragdakis (smaragd@di.uoa.gr)
Thesis: *Recovering Structural Information for Better Static Analysis.*

Master of Science, Computing Systems   2009 – 2012
Ethnikon kai Kapodistriakon Panepistimion Athinon / University of Athens
Department of Informatics & Telecommunications
Grade: 9.78/10. Top of graduating class (31 graduates).

Bachelor of Science, Computer Science   2004 – 2009
Ethnikon kai Kapodistriakon Panepistimion Athinon / University of Athens
Department of Informatics & Telecommunications
Grade: 8.80/10. Top of graduating class (∼50 graduates).

EXPERIENCE

Hellenic Army Information Technology Support Center (KEPYES)   June 2017 – present
Software Development Engineer   *Athens, Greece*

· *Description*: Served in the Research and Informatics Corps (mandatory military service) with Software Development responsibilities. Worked on the development of a Java EE Web application with JSF to support existing and add new, inter-organizational operations of the Hellenic Army.

University of Athens   July 2011 – May 2017
Research Assistant, Dept. of Informatics & Telecommunications   *Athens, Greece*

· *Supervisor*: Assoc. Prof. Yannis Smaragdakis (smaragd@di.uoa.gr)
· *FP7 Projects*: (1) SPADE ("Sophisticated Program Analysis, Declaratively"), (2) PADECL ("Advanced Program Analysis Using Declarative Languages")
· *Description*: Worked on the active development of the Doop framework for static analysis of Java projects. Developed `cclyzer`, a new static analysis framework for C/C++, using the LogicBlox Datalog engine, the LLVM infrastructure, Python, and C/C++.

LogicBlox, Inc   April 2012 – August 2012
Software Engineer Intern, Compiler Technologies   *Atlanta, GA, USA*

· *Supervisor*: Shan Shan Huang (ssh@logicblox.com)

University of Athens   October 2010 – June 2011
Research Developer, Dept. of Informatics & Telecommunications   *Athens, Greece*

· *Supervisor*: Prof. Alex Delis (ad@di.uoa.gr)
· *Project*: PERNASVIP
· *Description*: Development of the Itinerary Planner Server, i.e. the server who generates the itineraries that will be used for navigation by the end-users of the system

LANGUAGES AND CERTIFICATES

Greek (native), English (fluent)
Certificate of Proficiency in English, University of Michigan (USA)   2003

TECHNICAL SKILLS

Programming Languages	C/C++, Java, Python, Bash, Prolog, Datalog, Emacs Lisp
Version Control Systems	Git, Mercurial, Subversion
Build Automation	GNU Make, Apache Ant, Apache Maven
UNIX Skills	Shell Scripting, Systems Programming, Command-line Utilities
Editors & IDEs	Emacs, IntelliJ IDEA, Eclipse
Databases and Tools	SQL, MySQL, LogicBlox
Compilers and Debuggers	GCC / G++, GDB, Valgrind, LLVM
Frameworks	ASM, BCEL, AspectJ, CGAL, ECLiPSe
Web Development	HTML + CSS, PHP, JSP, JSF, PrimeFaces, Django, Bootstrap
Other	GNU Bison + Flex, LaTeX, LibreOffice, G Suite, Docker

PUBLICATIONS

· G. Balatsouras et al. "A Datalog Model of Must-alias Analysis". In: *Proc. of the 6th ACM SIGPLAN International Workshop on State Of the Art in Program Analysis*. SOAP '17. Barcelona, Spain: ACM, 2017.

· G. Balatsouras and Y. Smaragdakis. "Structure-Sensitive Points-To Analysis for C and C++". In: *Proc. of the 23rd International Symp. on Static Analysis*. SAS '16. Edinburgh, United Kingdom: Springer, 2016.

· Y. Smaragdakis, G. Balatsouras, and G. Kastrinis. "More Sound Static Handling of Java Reflection". In: *Proc. of the 13th Asian Symp. on Programming Languages and Systems*. APLAS '15. Pohang, Korea, 2015.

· Y. Smaragdakis and G. Balatsouras. "Pointer Analysis". In: *Foundations and Trends® in Programming Languages* 2.1 (2015), pp. 1–69.

· Y. Smaragdakis, G. Kastrinis, and G. Balatsouras. "Introspective Analysis: Context-sensitivity, Across the Board". In: *Proc. of the 2014 ACM SIGPLAN Conf. on Programming Language Design and Implementation*. PLDI '14. Edinburgh, United Kingdom: ACM, 2014, pp. 485–495.

· G. Balatsouras and Y. Smaragdakis. "Class Hierarchy Complementation: Soundly Completing a Partial Type Graph". In: *Proc. of the 28th Annual ACM SIGPLAN Conf. on Object Oriented Programming, Systems, Languages, and Applications*. OOPSLA '13. Indianapolis, Indiana, USA: ACM, 2013, pp. 515–532.

· Y. Smaragdakis, G. Balatsouras, and G. Kastrinis. "Set-Based Pre-Processing for Points-To Analysis". In: *Proc. of the 28th Annual ACM SIGPLAN Conf. on Object Oriented Programming, Systems, Languages, and Applications*. OOPSLA '13. Indianapolis, Indiana, USA: ACM, 2013, pp. 253–270.

GRANTS AND AWARDS

· SIGPLAN Professional Activities Committee (PAC) travel grant for ACM OOPSLA 2013.

ACTIVITIES

Teaching Assistant   2009 – 2014
University of Athens - Dept. of Informatics & Telecommunications

HOBBIES & INTERESTS

reading, music (piano, guitar), role-playing games, Emacs hacking, soccer