GEORGIOS "GEORGE" BALATSOURAS

23 Achaion Street ◇ Agia Paraskevi (Athens 15343), Attica, Greece

(Home) +30 210 6004683 ◇ (Cell) +30 6944 205788 ◇ gbalats@gmail.com

EDUCATION

Ph.D. Candidate, Static Program Analysis   2012 –
Ethnikon kai Kapodistriakon Panepistimion Athinon / University of Athens
Department of Informatics & Telecommunications
Advisor: Assoc. Prof. Yannis Smaragdakis (smaragd@di.uoa.gr)

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

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

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

· Contributed to the active development of BLOXANALYSIS, a tool used to perform static analysis of Datalog programs by representing them in a LogicBlox workspace.

· Implemented a clone-detection library using BLOXANALYSIS that is able to (i) trace isomorphic formulas, (ii) identify redundant rules in Datalog programs, and (iii) detect alternate indices that can be used in place of original predicates for optimization purposes.

· Implemented a string-concatenation library that reduces the space complexity of the intermediate materialized strings from $O(n^2)$ to $O(nlogn)$.

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

· Supervisor: Assoc. Prof. Yannis Smaragdakis (smaragd@di.uoa.gr)
· Project: PADECL ("Advanced Program Analysis Using Declarative Languages")

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, Haskell, Prolog, Datalog
Version Control Systems	Git, Mercurial, Subversion
Editors and IDEs	Emacs, Eclipse, NetBeans, Microsoft Visual Studio 6
Build Automation	GNU Make, Apache Ant, Apache Maven
UNIX Skills	Shell Scripting, Systems Programming, Command-line Utilities
Databases and Tools	SQL, MySQL, JDBC, DBDesigner
Compilers and Debuggers	GCC / G++, GDB, Valgrind
Concurrent Programming	Pthreads, MPI, Java (low-level API, `java.util.concurrent.*`)
Operating Systems	Linux, BSD, Unix and Unix-like operating systems, Windows
Frameworks	ASM, BCEL, AspectJ, CGAL, ECLiPSe
Web Development	HTML5 + CSS, PHP, JSP
Other	GNU Bison + Flex Lexical Analyzer, LaTeX, LibreOffice

ACTIVITIES

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

EXTRA-CURRICULAR ACTIVITIES

Reading, Music (piano, guitar), Soccer

PUBLICATIONS

· George Balatsouras and Yannis 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. ISBN: 978-1-4503-2374-1

· Yannis Smaragdakis, George Balatsouras, and George 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. ISBN: 978-1-4503-2374-1

GRANTS AND AWARDS

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