Pedro Valero

Personal Data

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Publications

SAS 2019 COMPLETE ABSTRACTIONS FOR CHECKING LANGUAGE INCLUSION

with Francesco Ranzato and Pierre Ganty.

MFCS 2019 A CONGRUENCE-BASED PERSPECTIVE ON AUTOMATA MINIMIZATION ALGORITHMS

with Elena Gutiérrez and Pierre Ganty.

DCC 2019 REGULAR EXPRESSION SEARCHING ON COMPRESSED TEXT

with Pierre Ganty.

ATVA 2017 A Language-Theoretic View on Network Protocols

with Pierre Ganty and Boris Köpf.

Software

HTTVALIDATOR: An input validator for HTTP messages that relies on recognizers for

context-free and regular languages (implemented using Bison and Flex respectively) to perform the validation. Publicly available on GitHub.

ZEARCH: A tool for regular expression searching on grammar-compressed text (im-

plemented in C). Publicly available on GitHub.

Research Stays

Feb-Jun 2018: Four months stay at Technische Universität München, in the Chair for Foundations

of Software Reliability and Theoretical Computer Science with Prof. Javier Esparza.

Jul-Nov 2018: Four months internship at Facebook (MPK, California) on the Data Compression

Team with Yann Collet. During this time I analyzed the strengths of grammar-based compression and its applications within the next generation of data compressors.

Work Experience

Jul 2019-Nov 2019: PhD Internship at Facebook Inc.

SEP 2016-CURRENT: PhD Student at IMDEA Software Institute. SEP 2015-MAY 2016: Internship at IMDEA Software Institute.

Jun-Sep 2015: Internship at Max Planck Institute for Software Systems.

Jun 2014-Apr 2015: Internship at IMDEA Software Institute.

Committees

ATVA 2019: Member of the Artifact Evaluation Committee. TACAS 2019: Member of the Artifact Evaluation Committee.

Education

2011 - 2016: Double degree at Computer Science and Mathematics

at Universidad Autónoma de Madrid

GPA: 9.14/10.0

Scholarships

2018: Short-Term DAAD Scholarship.

2011-2015: Four consecutive Excellence Awards for academic performance.