# MICHELE CHIARI

# Curriculum Vitae

🗷 Politecnico di Milano, Edificio 22 – Via Golgi 42, 20133 Milano, Italy

+39 02 2399 3707

michele.chiari@polimi.it

https://michiari.github.io/

# **EDUCATION (DEGREE GRANTING)**

NOV 2018 - PRESENT Information Technology

Pн.D.

Politecnico di Milano - Milano, Italy

2016 – 2018 Computer Science and Engineering

MASTER OF SCIENCE (LAUREA MAGISTRALE)

110/110 cum laude

Politecnico di Milano - Milano, Italy

2013 – 2016 Computer Science

BACHELOR OF SCIENCE (LAUREA TRIENNALE)

110/110 cum laude

University of Parma - Parma, Italy

# EDUCATION (OTHER) AND ACHIEVEMENTS

22/09/2019 - 27/09/2019 **Heidelberg Laureate Forum** 

7TH EDITION

Hosted by the Ruprecht Karl University of Heidelberg, Baden-Württenberg, Germany

2019 Award for the Best Italian Master Thesis in Theoretical Computer Science

ITALIAN CHAPTER OF THE EATCS

Title: Temporal Logic and Model Checking for Operator Precedence Words

01/2016 - 05/2016 Study Abroad Program (undergraduate, with scholarship)

Boston College - Boston, MA, USA

Computer Science, Mathematics and Statistics courses

# TEACHING EXPERIENCE (ACADEMIC)

05/2021 Tutoring Activity (15 hours)

Politecnico di Milano, Italy

Development of the final project for the course "Algoritmi e Principi dell'Informatica".

09/2020 – 12/2020 Teaching Assistant (26 hours, partially online)

Politecnico di Milano, Italy

Classroom exercise for the course "Principles of Programming Languages"

(Scheme, Haskell and Erlang Programming) Prof. Matteo Pradella.

09/2020 - 12/2020 Teaching Assistant (28 hours, partially online)

Politecnico di Milano, Italy

Classroom exercise for the course "Fondamenti di Informatica"

(C Programming) Prof. Raffaela Mirandola.

09/2019 - 12/2019 **Teaching Assistant (20 hours)** 

Politecnico di Milano, Italy

Classroom exercise for the course "Principles of Programming Languages"

(Scheme, Haskell and Erlang Programming) Prof. Matteo Pradella.

#### 09/2019 - 12/2019 **Teaching Assistant (20 hours)**

Politecnico di Milano, Italy

Classroom exercise for the course "Fondamenti di Informatica"

(C Programming) Prof. Raffaela Mirandola.

#### 03/2019 - 09/2019 **Tutoring Sessions (30 hours)**

Politecnico di Milano, Italy

Classroom exercise and tutoring for the course "Algoritmi e Principi dell'Informatica"

 $(Formal\ Languages,\ Automata\ and\ Computability\ Theory;$ 

Algorithms and Data Structures) Prof. Dino Mandrioli.

### 05/2019 Tutoring Activity (10 hours)

Politecnico di Milano, Italy

Development of the final project for the course "Algoritmi e Principi dell'Informatica".

#### 02/2018 - 06/2018 Tutoring Sessions (24 hours)

University of Parma, Italy

Classroom exercise for the course "Fondamenti dell'Informatica"

(Principles of Programming Languages, Automata and Computability Theory)

Prof. Roberto Bagnara

# TEACHING EXPERIENCE (OTHER)

#### 10/2020 - 12/2020 Lectures and Exercise Classes (24 hours, online)

CEFRIEL S.CONS.R.L., MILANO, ITALY

Fastweb Digital Academy 2020 - Basic and Advanced Python Coding Courses

#### 12/2019 Lectures and Exercise Classes (8 hours)

CEFRIEL S.Cons.R.L., MILANO, ITALY

Fastweb Academy 2019 - Advanced Python Coding Course

# 10/2019 Lectures and Exercise Classes (8 hours)

CEFRIEL S.Cons.R.L., MILANO, ITALY

Fastweb Academy 2019 – Python Coding Course

## 01/2019 Lectures and Exercise Classes (8 hours)

CEFRIEL S.CONS.R.L., MILANO, ITALY

Fastweb Academy 2019 - Android Coding Course

#### LANGUAGE SKILLS

ITALIAN Native speaker

ENGLISH Reading: excellent; Writing: excellent; Speaking: good. TOEFL iBT score: 110 (Oct 2014).

#### Publications

- [1] M. Chiari, D. Mandrioli, and M. Pradella, "Model-checking structured context-free languages," in *CAV '21*, LNCS, Springer, 2021. To appear.
- [2] R. Bagnara, M. Chiari, R. Gori, and A. Bagnara, "A practical approach to verification of floating-point C/C++ programs with math.h/cmath functions," *ACM Trans. Softw. Eng. Methodol.*, vol. 30, Jan. 2021.
- [3] D. Cattaneo, M. Chiari, G. Magnani, N. Fossati, S. Cherubin, and G. Agosta, "Fixm: Code generation of fixed point mathematical functions," *Sustain. Comput. Informatics Syst.*, vol. 29, Part B, p. 100478, 2021.
- [4] M. Chiari, D. Mandrioli, and M. Pradella, "Operator precedence temporal logic and model checking," *Theor. Comput. Sci.*, vol. 848, pp. 47–81, 2020.
- [5] M. Chiari, D. Bergamaschi, D. Mandrioli, and M. Pradella, "Linear temporal logics for structured context-free languages," in *Proceedings of the 21st Italian Conference on Theoretical Computer Science, Ischia, Italy, September 14-16, 2020*, vol. 2756 of *CEUR Workshop Proceedings*, pp. 115–121, CEUR-WS.org, 2020.

- [6] S. Cherubin, D. Cattaneo, M. Chiari, and G. Agosta, "Dynamic Precision Autotuning with TAFFO," *ACM Trans. Archit. Code Optim.*, vol. 17, no. 2, pp. 10:1–10:26, 2020.
- [7] S. Cherubin, D. Cattaneo, M. Chiari, A. Di Bello, and G. Agosta, "TAFFO: Tuning Assistant for Floating to Fixed Point Optimization," *Embedded Systems Letters*, vol. 12, no. 1, pp. 5–8, 2020.
- [8] N. Fossati, D. Cattaneo, M. Chiari, S. Cherubin, and G. Agosta, "Automated precision tuning in activity classification systems: a case study," in *PARMA-DITAM@HiPEAC 2020*, pp. 5:1–5:6, ACM, 2020.
- [9] M. Chiari, D. Mandrioli, and M. Pradella, "Word- and Tree-based Temporal Logics for Operator Precedence Languages," in *Proceedings of the 20th Italian Conference on Theoretical Computer Science, ICTCS 2019, Como, Italy, September 9-11, 2019*, vol. 2504 of *CEUR Workshop Proceedings*, pp. 222–228, CEUR-WS.org, 2019.
- [10] D. Cattaneo, A. Di Bello, M. Chiari, S. Cherubin, and G. Agosta, "Fixed point exploitation via compiler analyses and transformations: Poster," in *Proceedings of the 16th ACM International Conference on Computing Frontiers*, CF '19, (New York, NY, USA), pp. 292–294, ACM, 2019.
- [11] M. Chiari, D. Mandrioli, and M. Pradella, "Temporal logic and model checking for operator precedence languages," in *Proceedings Ninth International Symposium on Games, Automata, Logics, and Formal Verification, Saarbrücken, Germany, 26-28th September 2018*, vol. 277 of *EPTCS*, pp. 161–175, Open Publishing Association, 2018.