Curriculum Vitae

Name: Leopoldo Taravilse
Country: Argentina
e-mail: ltaravilse@gmail.com

About me:

I'm a person with great skills to develop algorithms that solve complex problems using a solid mathematical foundation, with interests on research and advanced problem solving. I feel very comfortable working by goals, even when they are not specific and with challenging deadlines. I have a proactive attitude that allows me to fulfill my goals with no need of tracing by my managers.

I have the ability to overcome adverse situations easily, that allow me to handle unsuccessful results and continue my work with no interruptions.

I adapt myself easily to working groups, providing knowledge to my colleagues but also learning from them, which allows me to get high value results to the team.

Education:

Universidad de Buenos Aires: PhD in Computer Sciences (formally starting April 2017 - Started my research in 2016)

Universidad de Buenos Aires: Computer Sciences Master's Degree obtained in 2016 (GPA: 8.38/10)

Universidad de Buenos Aires: Computer Sciences Bachelor's Degree obtained in 2014 (GPA: 8.08/10)

Universidad de Buenos Aires: Mathematics Master's Degree in course (9 courses and thesis pending, GPA: 8.1/10)

Skills and Knowledges:

Deep understanding as a result of my courses at university, my research experience and my spare time dedicated to learn in

- Algorithms and Data Structures.
- Graph Theory and Computational Complexity.

Natural Languages:

- Native Spanish speaker.
- Advanced level of English.

Programming Languages:

- Main languages:

  - C++
  - LaTeX.
  - Bash.

- Other languages:

  - Haskell.
  - Java.
  - Matlab/Octave.
  - Python.
  - PHP/Hack.
  - Smalltalk.
  - SQL.
  - Prolog.
  - Javascript.
  - Ruby.
  - Intel x86 Assembly.
  - Go.
  - Lisp.
  - Pascal.
  - Perl.

Experience:

Academic experience:

- Teaching experience:

  - **Head of TA's** (in charge of the mid term evaluations and coordinating all the practical courses): Algorithms and Data Structures III (2016), Algorithms and Data Structures I (2016) and Problems, Algorithms and Programming (2016 - Elective course)
  - **First class Teaching Assistant** (graduate TA): Algebra Workshop (2017), Operative Systems (2015), Algorithms and Data Strutures II (2015) and Algorithms and Data Structures III (2015)
  - **Second class Teaching Assistant** (student TA): Algorithms and Data Structures I (2012), Operative Systems (2014) and Algorithms and Data Structures III (2015).

- Research experience:

  - Presented a talk on **Latin American Workshop on Cliques in Graphs** 2016 "On graphs with linear convergence" coauthors: Flavia Bonomo, Martín Frias Armenta. "On the parameterized complexity of finding all cliques of a graph", coauthors: Miguel Pizaña, Ismael Robles, presented by Ismael Robles . Both papers are to be published soon.
  - Researcher at Universidad de Buenos Aires since March, 2016. Under the supervision of Flavia Bonomo working on **Graph Theory and Computational Complexity** and started working on 2017 on my PhD with Verónica Becher in **Normal Numbers and De Bruijn Sequences**.
  - **Master's thesis** under the supervision of Flavia Bonomo and Martín Eduardo Frias Armenta, studying the **convergence of the clique operator in specific families of graphs and the topologies of other families closed under the clique operator**.

- Other experience:

  - Computer Science department's **councelor** at Universidad de Buenos Aires as student (2015) and as graduate (2016-2017).
  - Member of a committee in charge of evaluating the **Computer Science syllabus** at Universidad de Buenos Aires (2016).

Industry experience:

- **Six months internship as a Software Engineer at Medallia:** 2015-2016.
- **Three months internship as a Software Engineer at Facebook:** 2015.
- **Facebook Campus Ambassador** in Argentina: 2015.
- **Software Engineer at Avalancha.com:** 2014.
- **Three months internship as a Sofware Engineer at Google:** 2012.

References:

- Bill Poucher (Baylor University).
- Nikola Mihajlovic (Facebook).
- Verónica Becher (UBA).
- Guido de Caso (Medallia).
- Flavia Bonomo (UBA).
- Diego Garbervetsky (UBA).
- Bhuwan Chopra (Facebook).
- Santiago Pérez González (Medallia).
- Jay Akkad (Google).
- Patricio Traverso (Avalancha).

Important results achieved in the industry:

- In Medallia I developed a memory optimization algorithm for which the first estimations where around a **30% memory saving, and an important money saving** for the company in hardware.
- My project at Facebook was to solve a load balancing problem between two internal data base architectures. I worked together with three diferent teams, and **the impact of my project reached over 200 engineers** who were benefited by a performance optimization.

Experience facing important challenges mainly in the context of Mathematics and Programming Contests:

- Organization of Maths and Programming competitions and events related to this competitions:

  - **Director and lecturer at Argentina's Training Camps for Programming Contests** since it's first edition in 2010. Hosted 8 times on 6 different universities. Main responsible for the coordination of the classes, relationship with sponsors, and the host university, receiving students from 7 countries in Latin America.
    This model of Training Camps was copied by several universities in the continent where I was invited many times to be the lecturer in charge or to choose a professor in charge when I couldn't assist.
  - **Problemsetter and member of the jury at Torneo Argentino de Programación** (the National round of ACM ICPC in Argentina) in 2012, 2013, 2014 and 2016.
  - **Problemsetter and member of the jury at ACM ICPC Latin American Regional Contest** in 2013 and 2014.
  - **Problemsetter for TopCoder** (over 40 problems) **and Facebook Hacker Cup** 2015 taking part of the finals problem set preparation.
  - Chosen as **Community Advisory Board** member by TopCoder on 2017.

- Programming Competitions participation:

  - **Coach** of Universidad Nacional de Rosario's team at **ACM-ICPC World Finals 2016**. Obtained **Latin American Champion** award.
  - Coach of three teams from Universidad Nacional de Rosario and Universidad Nacional de La Plata at ACM ICPC Latin American Regional Contest 2015, obtaining 1st place, 7th place and 64th place in the South America/South Region.
  - **Contestant** of Universidad de Buenos Aires' team at **ACM ICPC World Finals 2010 and 2012**.
  - Contestant of one of the Universidad de Buenos Aires' teams at ACM ICPC Latin American Regional Contest 2008, 2009, 2010 and 2011 obtaining 7th place, 1st place, 4th place and 3rd place respectively in the South America/South Region with teams TVG (2008 to 2010) and GLP (2011).
  - Several **top 500 results** in **Google Code Jam** (user: ltaravilse), **Facebook Hacker Cup** and **TopCoder Open** (user: ltaravilse) including even some **top 200 results**. Also several participations in CodeForces (user: ltaravilse) and TopCoder where I reached the **top 3%** (with a rating of 2242) **in the worldwide ranking** in the Algorithmic track and with good results in the Marathon Match track.

- Mathematical Competitions participation:

  - **Silver Medal** at Iberoamerican Mathematical Olympiad for university students 2015.
  - 4th place (2014) and 6th place (2013) at CIMA (University Math Competition in Argentina) in team with Agustín Gutierrez.
  - Several Honorable Mentions and top places at Math Olympiads at Regional, National and International level at High School level between 2004 and 2006 including a **Bronze Medal** in Asia Pacific Mathematical Olympiad 2006.