

DAVID APARÍCIO

– CURRICULUM VITAE –

DECEMBER 8, 2018

PERSONAL INFORMATION

PLACE AND DATE OF BIRTH: LAUSANNE, SWITZERLAND | 3RD MAY 1991
ADDRESS: RUA DE OLIVEIRA MONTEIRO 206 H44-AY, 4050-438, PORTO, PORTUGAL
EMAIL: david.oliveira.aparicio@gmail.com

MAIN RESEARCH INTERESTS

NETWORK SCIENCE, PARALLEL COMPUTING, DATA MINING, COMPUTATIONAL BIOLOGY.

TECHNICAL SKILLS

PROGRAMMING LANGUAGES: C/C++, PYTHON, JAVA, R, SQL.
PARALLEL COMPUTING LIBRARIES: PTHREADS, MPI, OPENMP AND CUDA.

LANGUAGES

NATIVE PORTUGUESE SPEAKER AND FLUENT IN ENGLISH.

EDUCATION

2014-19 **PhD student in Computer Science** IN THE MAP-I PROGRAMME
(*expected*) FACULTY OF SCIENCE OF THE UNIVERSITY OF PORTO, PORTO, PORTUGAL
THESIS: “NETWORK COMPARISON AND NODE RANKING IN COMPLEX NETWORKS”.
ADVISORS: PROF. PEDRO RIBEIRO AND PROF. FERNANDO SILVA

2012-14 **MSc in Computer Science**
FACULTY OF SCIENCE OF THE UNIVERSITY OF PORTO, PORTO, PORTUGAL
SPECIALIZATION: DATA MINING AND ADVANCED DATA PROCESSING
THESIS: “PATTERN DISCOVERY IN COMPLEX NETWORKS USING PARALLELISM”, JUNE 2014.
ADVISORS: PROF. PEDRO RIBEIRO AND PROF. FERNANDO SILVA
FINAL GRADE: 19/20 (A)

2009-12 **Undergraduate Degree in Computer Engineering Sciences**
FACULTY OF SCIENCE OF THE UNIVERSITY OF PORTO, PORTO, PORTUGAL
FINAL GRADE: 15/20 (A)

2006-09 FINISHED HIGH-SCHOOL (PORTUGAL’S 12TH YEAR), GENERAL SCIENTIFIC AREA
ESCOLA SECUNDÁRIA DE VIRIATO, VISEU, PORTUGAL
FINAL GRADE: 16/20

WORK EXPERIENCE

- DEC 2018 – | **Data Scientist**
FEEDZAI
- OCT 2018 – | **Collaborator**
CRACS & INESC-TEC
- OCT 2014 - OCT 2018
(4 YEARS) | **PhD Researcher**
CRACS & INESC-TEC
SUPERVISORS: PROF. PEDRO RIBEIRO & PROF. FERNANDO SILVA, CRACS & INESC-TEC
SUBJECT: DEVELOP NEW MEASURES TO COMPARE STATIC AND TEMPORAL NETWORKS.
DEVELOP NEW MEASURES TO COMPARE NODES IN DIRECTED NETWORKS.
- JAN - MAR 2017
(3 MONTHS) | **Research Intern**
NEWCASTLE UNIVERSITY, NEWCASTLE, UNITED KINGDOM
SUPERVISOR: PROF. MARCUS KAISER, NEWCASTLE UNIVERSITY
SUBJECT: DEVELOP CLASSIFIERS FOR EPILEPSY, AGE AND IQ PREDICTION
USING SUBGRAPH METRICS.
- JUL - AUG 2015
(2 MONTHS) | **Research Intern**
THE UNIVERSITY OF TEXAS AT AUSTIN, TEXAS, UNITED STATES
SUPERVISOR: PROF. KESHAV PINGALI, UT-AUSTIN
MENTOR: ANDREW LENHARTH, UT-AUSTIN
SUBJECT: DEVELOP EFFICIENT PARALLEL IMPLEMENTATIONS OF SUBGRAPH COUNTING
ALGORITHMS USING THE GALOIS PARALLEL GRAPH FRAMEWORK.
- APR - OUT, 2014
(7 MONTHS) | **Researcher**
CRACS & INESC-TEC
SUPERVISORS: PROF. PEDRO RIBEIRO & PROF. FERNANDO SILVA, CRACS & INESC-TEC
"PATTERN FINDING IN LARGE SCALE NETWORKS" : DEVELOP PARALLEL APPROACHES TO
EXPLORE THE STRUCTURE OF LARGE NETWORKS. I WORKED ON EFFICIENT AND SCALABLE
SUBGRAPH COUNTING ALGORITHMS USING PTHREADS, OPENMP, AND CUDA.
- JUL - AUG 2014
(2 MONTHS) | **Research Intern**
THE UNIVERSITY OF TEXAS AT AUSTIN, TEXAS, UNITED STATES
SUPERVISOR: PROF. KESHAV PINGALI, UT-AUSTIN
MENTOR: SREEPATHI PAI, UT-AUSTIN
SUBJECT: DEVELOP AN EFFICIENT MINIMUM SPANNING TREE IMPLEMENTATION
FOR THE GPU USING CUDA.
- MAR - DEC, 2012
(10 MONTHS) | **Junior Researcher**
CRACS & INESC-TEC
SUPERVISOR: PEDRO RIBEIRO, CRACS & INESC-TEC
"ONLINE JUDGE" : A WEB REPOSITORY FOR PROGRAMMING PROBLEMS WITH AUTOMATIC
JUDGING OF THE USERS' SOLUTIONS, BUILT USING JAVA, SMARTGWT, REST, AND MOOSHAK.

RESEARCH GRANTS

- OCT 2014-OCT 2018 | FCT DOCTORAL GRANT FUNDED BY POPH (*PD/BD/105801/2014*).
- APR-OCT 2014 | RESEARCH GRANT (BI) IN PROJECT *SIBILA (NORTE-07-0124-FEDER-000059)*.
- MAR-DEC 2012 | JUNIOR RESEARCH GRANT (BIC) IN PROJECT *PESt* OF CRACS/INESC-TEC.

PUBLICATIONS

- DAVID APARÍCIO, PEDRO RIBEIRO, TIJANA MILENKOVIC, AND FERNANDO SILVA. "TEMPORAL NETWORK ALIGNMENT VIA GOT-WAVE". (*submitted to Oxford Bioinformatics*).
- JORGE SILVA, DAVID APARÍCIO, AND FERNANDO SILVA. "OTARIOS: OPTIMIZING AUTHOR RANKING WITH INSIDERS/OUTSIDERS SUBNETWORKS". IN *International Workshop on Complex Networks and their Applications*, 143-154, CAMBRIDGE, UNITED KINGDOM, DECEMBER, 2018.
- DAVID APARÍCIO, PEDRO RIBEIRO, AND FERNANDO SILVA. "TEMPORAL NETWORK COMPARISON USING GRAPHLET-ORBIT TRANSITIONS". IN *PLoS One*, Vol. 13(10), e0205497, OCTOBER, 2018.
- DAVID APARÍCIO, PEDRO RIBEIRO AND FERNANDO SILVA. "EXTENDING THE APPLICABILITY OF GRAPHLETS TO DIRECTED NETWORKS". IN *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 14(6), 1302-1315, 2017.
- DAVID APARÍCIO, PEDRO RIBEIRO AND FERNANDO SILVA. "A SUBGRAPH-BASED RANKING SYSTEM FOR PROFESSIONAL TENNIS PLAYERS". IN *7th International Workshop on Complex Networks (CompleNet 2016)*, SPRINGER, DIJON, FRANCE, MARCH, 2016.
- DAVID APARÍCIO, PEDRO PAREDES AND PEDRO RIBEIRO. "A SCALABLE PARALLEL APPROACH FOR SUBGRAPH CENSUS COMPUTATION". IN *7th International Workshop on Multi/many-Core Computing Systems (MuCoCoS 2014)*, EURO-PAR'2014 WORKSHOPS, SPRINGER, PORTO, PORTUGAL, AUGUST, 2014.
- DAVID APARÍCIO, PEDRO RIBEIRO AND FERNANDO SILVA. "PARALLEL SUBGRAPH COUNTING FOR MULTICORE ARCHITECTURES". IN *12th IEEE International Symposium on Parallel and Distributed Processing with Applications (ISPA 2014)*, IEEE, MILAN, ITALY, AUGUST, 2014.
- DAVID APARÍCIO. "PATTERN DISCOVERY IN COMPLEX NETWORKS USING PARALLELISM". *MSc Thesis. Masters Programme in Computer Science*. FACULTY OF SCIENCE OF THE UNIVERSITY OF PORTO, JULY, 2014.