Resume

PERSONAL INFORMATION

Daniel Ruiz-Perez

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https://github.com/DaniRuizPerez

https://www.linkedin.com/in/daniel-ruiz-perez

Date of birth 04/12/1993 | Nationality Spanish | Visa Status F1

HIGHER EDUCATION

2016–2020 — **Ph.D. In Computer Science**

Florida International University, Miami, FL (USA). GPA: 4.0 (Top 1%).

Areas of research: Bioinformatics, Machine Learning, Data Mining, Algorithms, Time Series.

2015–2016 — **M.S. in Software Engineering**

University of A Coruña (Spain). GPA: 3.52 (Top 5%).

All coursework completed. Master's thesis to be defended in Fall 2019.

2011–2015 — **B.S. in Computer Science**

University of A Coruña (Spain). GPA: 3.41 (Top 5%).

Senior project collaborating with CHROMEVOL (FIU): Use of machine learning to analyze genomic data and development of a bioinformatics platform currently accessible at: http://chromevol.fiu.edu/.

WORK EXPERIENCE

2016–2020 — **Graduate Assistant: TA (2016-2017, 2018-2019) and RA (2017-2018).**

Florida International University, Miami, FL (USA).

I am a member of the Bioinformatics Research Group (BioRG), where I am developing a new temporal alignment algorithm in collaboration with CMU. I have experience with Dynamic Bayesian Networks (DBNs) and have worked on improving an opensource DBN package. I have strong collaborators in the medical field and with which I do microbiome analysis of Bacterial Vaginosis (BV) and are hoping to change the standard of care of BV with what we have shown.

Teaching experience as a TA of: Graduate Theory of Computation (COT 5310), Operating Systems Principles (COP 4610), Introduction to Microcomputers (CGS 2060), and Academic Success Initiative Ambassador for Programming I and II, Discrete Math and Discrete Structures.

2015–2016 — **Software Engineer**

Aldaba Information Technology and Services, A Coruña (Spain).

Analysis, design, development, implementation and maintenance of the following custom software solutions: an expert system in Java using IBM ODM, an alarm system in case of radioactive alert in C# and the back-end of a web application with Microsoft technologies in a 7 people SCRUM team.

2014–2015 — **Undergraduate research assistant**

Dept. of Information and Communication Technologies. University of A Coruña (Spain).

Use of machine learning to analyze genomic data and development of a bioinformatic application.

2012–2014 — **Judo Instructor**

Cambre Ocio SL, A Coruña (Spain).

PERSONAL SKILLS

Languages

- **Spanish**, **Galician**: Native
- **English**: Full professional proficiency (TOEFL iBT: 104/120).
- **Portuguese, French**: Elementary proficiency.

Job-related skills

- **Experience in**: Bioinformatics, Machine Learning, Algorithms, Data Mining and Data Analysis, Time Series Analysis, Software Engineering, Back-end Web Development, Android, SCRUM.
- **Programming Languages**: R, Python, MATLAB, Java, C, C#. **Frameworks**: Django, .NET.
- **Databases**: MySQL, PostgreSQL. **IDEs**: Visual Studio, Eclipse, PyCharm, Android Studio.
- **Prior experience**: RDF and Semantic Web, Lucene and Web Crawlers, Game Theory, Robotics, Videogame Development and Computer Graphics, Expert Systems, Automatic Reasoning, C++, Computer Vision.

Other skills

- Certified Judo instructor and 2ºDan Judo black belt. Several times autonomic champion and competitor in Spanish and international championships.

RESEARCH WORK

Publications

- **Ruiz-Perez D**, Guan H, Madhivanan P, Mathee K, Narasimhan G (2018). So you think you can PLS-DA?. International Conference on Computational Advances in Bio and medical Sciences (ICCABS) at Las Vegas, NV (USA).
- Sazal M, **Ruiz-Perez D**, Cickovski T, Narasimhan G (2018). Inferring Relationships in Microbiomes from Signed Bayesian Networks. International Conference on Computational Advances in Bio and medical Sciences (ICCABS) at Las Vegas, NV (USA).

Conferences

- **Ruiz-Perez D**, Colbert B, Coudray M, Mathee K, Madhivanan P, Narasimhan G (2018). Vaginal microbial profile of women with asymptomatic bacterial vaginosis in US (Abstract and Oral Presentation). Microbiology Society Annual Conference at Birmingham (UK).
- Colbert B, Coudray M, **Ruiz Perez D**, Kumari H, Madhivanan P, Narasimhan G, Mathee K (2018). To Treat or not to Treat: Bacterial Vaginosis and its Relationship to Human Papillomavirus (Poster). Microbiology Society Annual Conference at Birmingham (UK).
- **Ruiz-Perez D**, Colbert B, Coudray M, Mathee K, Madhivanan P, Narasimhan G (2018). Vaginal microbial profile of women with asymptomatic bacterial vaginosis in US (Oral Presentation). Annual Biomedical and Comparative Immunology Symposium 2018 at Miami, FL (USA).
- Suarez-Ulloa V, Aguiar-Pulido V, **Ruiz-Perez D**, Narasimhan G, Eirin-Lopez JM (2016). Network-based analysis of chromatin-associated gene expression dynamics in response to environmental stress (Poster). Intelligent Systems for Molecular Biology (ISMB) at Orlando, FL (USA).

Speaker at

- International Work-Conference on Bioinformatics and Biomedical Engineering 2016 (IWBBIO) at Orlando, FL (USA) presenting "Network-inspired approaches for transcriptomic analyses".
- International Conference on Biomedical Research 2014 at A Coruña (Spain), presenting "Bioinformatic Platform for the storage and query of massive sequencing data."

ADDITIONAL INFORMATION

Honors and awards

- International Scholar Laureate Program (ISLP) Delegation on Engineering & Technology. Best project award, 2018.
- ISLP Delegation on Engineering & Technology, Golden Key full scholarship, 2018
- Biomedical Research Initiative Award, 2017.
- Graduate Assistantship from Florida International University, 2016-Present.
- Undergraduate research scholarship from the Ministry of Science and Education, Spain, 2015.
- Graduated from high school with honors. GPA: 3.98, 2011.
- Exceptional athlete recognition, Cambre City Council, 2007-2010.

Exams

- ETS GRE Quantitative: 168/170.

Societies and fraternities

- Golden Key International Honor Society.
- Lambda Chi Alpha, High Rho Position.