Germain García Zanabria
Curriculum Vitae

PERSONAL INFORMATION

Name:	Germain García Zanabria
D. of Birth:	3 July, 1991
Address:	Urb. Los Incas/C-4/Cusco/Cusco/Perú
Telephone:	(51) 984 145694
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Marital Status:	Single
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Calificado como
Investigador RENACYT

CONCYTEC

Código de Registro: P0034979
Nivel: VI
Fecha de Registro: 17/06/2022
Estado: al 14/12/2022

I received my Ph.D. degree [2017-2021] in Computer Science (Cs) from Sao Paulo University (USP), Brazil. I received my Master's Degree [2014-2016] in Cs at Universidad Católica San Pablo (UCSP), Peru. I conducted my Post-Doctoral research on dropout patterns in Peruvian universities at the Center for Research and Innovation in Computer Science (RICS) of UCSP. I was a visiting researcher [2019] at the Visualization Imaging and Data Analysis Center (VIDA) of New York University (NYU), USA. My areas of interest are data visualization, visual analytics, machine learning, data science, crime analysis, crime prediction, dropout analysis, geo-referenced data, Spatiotemporal analysis, and computer science for social goods.

EDUCATION

PhD. in Computer Science　　　　　　　　　　　　　　　　　　　2017 - 2020
University of São Paulo - Brazil
> PhD. in Computer Science at the Institute of Mathematical and Computer Sciences (ICMC) of the University of São Paulo - Brazil, with focus on data science and crime data analysis.

PhD internship　　　　　　　　　　　　　　　　　　　　　　　　2019 - 2020
New York University
> VIDA- lab
Visualization Imaging and Data Analysis Center - Urban data Analysis

Master in Computer Science　　　　　　　　　　　　　　　　　　　2014 - 2016
Universidad Católica San Pablo
> Master Degree in Computer Science, Universidad Católica San Pablo de Arequipa - Perú. research has focused on: Visualization of the information, Data visualization, Visualization of multidimensional data, multidimensional data projection.

Systems Engineering　　　　　　　　　　　　　　　　　　　　　　2018 - 2012
Universidad Nacional de San Antonio Abad del Cusco
> Systems Engineering Degree, Universidad Nacional de San Antonio Abad del Cusco - Perú.

PROFESSIONAL EXPERIENCE

Professor   Oct. - 2021

Universidad Católica San Pablo

Professor in business analytics certification.

Professor   Jun. - Sep 2022

Universidad Nacional de San Antonio Abad del Cusco.

Professor Data Science and Research projects.

Professor   Oct. - 2021

Universidad Católica San Pablo

Professor in Data Science certification.

Research Visitor   2019 - 2019

NEW YORK UNIVERSITY

Research project development with urban data, specifically with crime data.

Software Developer   2013 - 2014

EMP GENERACION ELECTRICA MACHUPICCHU S A

Software Developer at EGEMSA, Development server system to manage Unix backup files.

Professional Internship   2012 - 2013

EMP GENERACION ELECTRICA MACHUPICCHU S A

Supporting and Help Desk to users of enterprise systems. Software engineering and development direct to ERP systems.

Software Developer   2011 - 2012

CODE PERU

Software development directed to web applications with HTML5, JavaScript, PHP, CSS3, and C#.

RESEARCH GRANTS

CONCYTEC - FONDECYT   2014 - 2016

Concytec: Concytec: Technology and Technological Innovation – Perú, Fondecyt 011-2013 Master Program, Period: 04/2014 to 04/2016, Position: Fellowship - Multidimensional Data Visualization.

FAPESP - CEPID   2017 - 2020

CeMEAI: Center for Mathematical Sciences Applied to Industry, Fapesp #2017/05416-1, Period: 03/2017 to 12/2020, Position: Fellowship - Crime Visual Analytic.

BEPE - Fapesp CEPID   2019 - 2019

CeMEAI: Center for Mathematical Sciences Applied to Industry, Fapesp #2019/04434-1, Period: 05/2019 to 12/2019, Position: Fellowship - Urban Visual Analytic).

LINKS TO PERSONAL SITES

- **Personal**:
  https://dina.concytec.gob.pe/appDirectorioCTI/VerDatosInvestigador.do?id_investigador=34979

- **Additional CV**:
  http://lattes.cnpq.br/7345868777156264

- **Linkedin** :
  https://www.linkedin.com/in/germain-garcia-zanabria-165544b4/

- **E-mails**:
  germaingarcia17@gmail.com,
  germain.garcia@unsaac.edu.pe, and
  germain.garcia@ucsp.edu.pe

PRIZES AND AWARDS

- Best Master dissertation (PEIT 2017), Universidad Católica San Pablo de Arequipa - Perú (2017).

- Best Computer Graphics/Visualization Main Track Papers Awards, 33rd - SIBGRAPI – Conference on Graphics, Patterns and Images (2020).

- Best paper Awards, (CLEI XLVII) - Special Issue of CLEI (2021).

- Teacher Evaluation Highlight, Universidad Nacional San Antonio Abad del Cusco - Perú (2022).

- Upper third student, Universidad Nacional San Antonio Abad del Cusco - Perú (2013).

SCIENTIFIC RESULTS

- **Garcia-Zanabria, G.**, Silveira, J. A., Poco, J., Paiva, A., Nery, M. B., Silva, C. T., Adorno S., & Nonato, L. G. (2019). CrimAnalyzer: Understanding Crime Patterns in São Paulo. IEEE Transactions on Visualization and Computer Graphics (2020).

- **Garcia-Zanabria, G.**, Poco, J., Batista Nery, M., Silva, C. T., Raimundo, M., & Nonato, L. G. CriPAV: Street-Level Crime Patterns Analysis and Visualization. IEEE Transactions on Visualization and Computer Graphics (2021).

- **Garcia-Zanabria, G.**, Batista Nery, M., Gomez-Nieto, E., Luis Gustavo Nonato. Mirante: A visualization tool for crime analysis in cities (2020). *Computers & Graphics.*

- **Garcia-Zanabria, G.**, Luis Gustavo Nonato, and Erick Gomez-Nieto. iStar (i*): An interactive star coordinates approach for high-dimensional data exploration, *Computers & Graphics*, 60:107–118, 2016.

- **Garcia-Zanabria, G.**, Gutierrez-Pachas, D. A., Camara-Chavez, G., Poco, J., & Gomez-Nieto, E. (2022). SDA-Vis: A Visualization System for Student Dropout Analysis Based on Counterfactual Exploration. Applied Sciences, 12(12), 5785.

- Alvarenga Silveira, J., **Garcia Zanabria, G.**, Paiva A., Piccirillo D.,Batista Nery, M., Adorno S., & Luis Gustavo Nonato(2019). São Paulo City Schools and Their Surroundings: from Non-Negative Tensor Factorization to Pattern Identification. XL Congresso Nacional de Matemática Aplicada e Computacional

- Alvarenga Silveira, J., **Garcia Zanabria, G.**, Paiva A., Batista Nery, M., Adorno S., & Luis Gustavo Nonato. Crime Patterns and Urban Infrastructure around São Paulo City Schools: An Analytical Study via Non-Negative Tensor Factorization (2020).

- Gutierrez-Pachas, D. A., **Garcia-Zanabria, G.**, Cuadros-Vargas, A. J., Camara-Chavez, G., Poco, J., Gomez-Nieto, E. (2022). How Do Curricular Design Changes Impact Computer Science Programs?: A Case Study at San Pablo Catholic University in Peru. Education Sciences.

- Pachas, D. A. G., **Garcia-Zanabria, G.**, Cuadros-Vargas, A. J., Camara-Chavez, G., Poco, J., & Gomez-Nieto, E. (2021, October). A comparative study of WHO and WHEN prediction approaches for early identification of university students at dropout risk. In 2021 XLVII Latin American Computing Conference (CLEI) (pp. 1-10). IEEE.

- Quispe-Torres, G. F., **Garcia-Zanabria, G.**, Vera-Olivera, H., & Enciso-Rodas, L. (2021, October). Trajectory Anomaly Detection based on Similarity Analysis. In 2021 XLVII Latin American Computing Conference (CLEI) (pp. 1-10). IEEE.

- Quispe-Torres, G. F., **Garcia-Zanabria, G.**, Vera-Olivera, H., & Enciso-Rodas, L. (2022). Feature-based Trajectory Anomaly Detection. In 2022 CLEI electronic journal.

PERSONAL SKILLS AND COMPETENCES

Languages:

- **Spanish:** Understands well, speaks well, reads well, writes well.

- **English:** Understands well, speaks reasonably, reads well, writes well.

- **Portuguese:** Understands well, speaks well, reads well, writes well.

- **Quechua:** Understands well, speaks well, reads well

	Reading	*Speaking*	*Writing*	*Undestanding*
Enlglish	Advance	Reasonably	Advance	Advance
Portugues	Advance	Advance	Advance	Advance
Quechua	Reasonably	Advance	Reasonably	Advance
*Spanish**	Advance	Advance	Advance	Advance