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Assistant Professor Computer Science  
Seattle Pacific University  
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## I. EDUCATION

- 2012. PhD Information Systems and Applications, National Tsing Hua University, Taiwan
- 2003. MS Computer Science, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico
- 1999. BS Computer Science, Universidad Tecnológica Centroamericana, Honduras

## II. ACADEMIC APPOINTMENTS

- a. Seattle Pacific University
  - 2017 – present. Computer Science Assistant Professor, teaching Problem Solving and Programming, and Concepts in Programming Languages
- b. Universidad Tecnológica Centroamericana
  - 2015 – 2017 Research Director
  - 2012 – 2015 Computer Science Research Professor, teaching C++ Programming, Data Structures, Java Programming, Theory of Computation
  - 2004 – 2007 Chairman of Computer Science Department
  - 1999 – 2004 Assistant to Director of Computer Science and Telecommunications School
- c. Pacific American School
  - 2011 – 2012 Computer Teacher, teaching Java Programming, AP Computer Science, Algebra II, Spanish I, Adobe Flash, G8 Computer, G7 Computer
- d. National Tsing Hua University
  - 2010 – 2011 Computer Science Department Lecturer, teaching Java Programming, C Programming for Physics Major Students, Introduction to Computer Science

## III. PEER REVIEW PUBLICATIONS

- 1. **Carlos Roberto Arias**, Jorge Antonio García, Alejandro Corpeño. Population as Auditor of an Election Process in Honduras: The Case of the VotoSocial CrowdSourcing Platform. Policy & Internet, 2015
- 2. **Carlos Roberto Arias**, Hsiang-Yuan Yeh, and Von-Wun Soo. Biomarker identification for prostate cancer and lymph node metastasis from microarray data and protein interaction network using gene prioritization method. The Scientific World Journal, 2012
- 3. Liang-Chun Chen, Hsiang-Yuan Yeh, Cheng-Yu Yeh, **Carlos Roberto Arias**, and Von-Wun Soo. Identifying co-targets to fight drug resistance based on a random walk model. BMC Systems Biology, 2012.
- 4. **Carlos Roberto Arias** and Von-Wun Soo. Computing all pairs shortest paths on graphs with articulation points. Journal of Computer Technology and Application, 2011.
- 5. Hsiang-Yuan Yeh, Cheng-Yu Yeh, **Carlos Roberto Arias**, and Von-Wun Soo. Pathway detection from protein interaction networks corresponding to gene expression data using color-coding methods and a\* search algorithms. The Scientific World Journal, 2011
- 6. Book Chapter: **Carlos Roberto Arias**, Hsiang-Yuan Yeh, and Von-Wun Soo. Bioinformatics, chapter Disease Gene Prioritization. INTECH, Rijeka, Croatia, 2011.

## IV. ACADEMIC PEER-REVIEWED PRESENTATIONS

- 1. Carlos Eduardo Morazan, **Carlos Roberto Arias**: Using Technology to Enhance Class Participation. In: The proceeding of the Fifteenth LACCEI Latin American Conference for Engineering and Technology. (2017)
- 2. **Carlos Roberto Arias**: Facebook in Higher Education: The UNITEC Case. In: The proceeding of the Thirteenth LACCEI Latin American Conference for Engineering and Technology. (2015)

3. **Carlos Roberto Arias**, Jorge Antonio García, José Evelio Serrano: Evaluation of Social Public Policy: Department of Social Development in Honduras. In: The proceeding of the First Conference on E-Democracy and E-Government. (2014)
  4. **Carlos Roberto Arias**: Biological Network Exploration Tool: BioNetXplorer. In: The proceeding of the Twelfth LACCEI Latin American Conference for Engineering and Technology. (2014)
  5. **Carlos Roberto Arias**, Jorge Antonio García, Alejandro Corpeño: Population as Auditor of an Election Process in Honduras: VotoSocial. In: The proceeding of IPP2014: Crowdsourcing for Politics and Policy. (2014)
  6. **Carlos Roberto Arias**: Implementation of Online Collaborative Learning using Wiki. In: The proceeding of the Eleventh LACCEI Latin American Conference for Engineering and Technology. (2013)
  7. Liu, H.C., **Arias, C.R.**, Soo, V.W.: Bioir: An approach to public domain resource integration of human protein-protein interaction. In: The proceeding of the Seventh Asia Pacific Bioinformatics Conference (2009)
- V. OTHER: INVITED PRESENTATIONS, PANELS AND PROFESSIONAL WORKSHOPS
1. TEDx Speaker, Tegucigalpa 2015
  2. IEEE COPIMERA 2015 Keynote Speaker
- VI. PEER REVIEW EXPERIENCE
1. International Journal of Bioinformatics Research and Applications (IJBRA)
  2. Internet in Policy and Politics (IPP)
  3. LACCEI Latin American Conference for Engineering and Technology
- VII. AWARDS AND GRANTS
1. Professor of the Year, Computer Science Department, UNITEC, 2013
- VIII. RELATED WORK EXPERIENCE
1. Software analysis, design and development consultant, Honduras 2012 – 2017.
  2. Internship in FoxConn Optomechanical Research Facility, September – October 2009
  3. DBA and Development Coordinator Assistant of “Centro de Información Geográfico” (Geographic Information Center), UNITEC 2000 – 2001
  4. Database and Development Junior Consultant, Information Technology Integrators SA 1998 – 1999
  5. Software Development and IT Projects Experience
    - a. Computer Science Senior Projects Advisor, 17 years. Outstanding products: ChacBolay Robot UNITEC, Calcification Detection System, Programming Standards Control System, Online Project Management System, etc.
    - b. Scientific Applications Development: 5 years. Outstanding product: BioNetXplorer, an application for the structural and semantic exploration of biological networks, with the ability integrate to Cytoscape, to Hadoop (Cloud and Cluster Computing Server) for large data set analysis, webservice integration to National Institute of Health in the USA (NIH), offline Gene Ontology data integration.
    - c. Analysis, Design, Development, and Development Management of the project of implementation of the Single System for Evaluation of Social Public Policy, a Monitoring and Evaluation System for the Department of Social Development in Honduras.
    - d. Diagnostics of IT Infrastructure for the Régimen de Aportaciones Privadas (Private Contributions Regime).
    - e. Moodle LMS implementation for UNITEC/GIZ Project: Modular Certificate in Multiple Competences
    - f. Moodle LMS implementation UNITEC/USAID Project: Together for the Improvement of the Educational Quality