

PEDRO JUAN RODRIGUEZ ESQUERDO

PO Box 23355

Río Piedras PR 00931

<http://www.edustatspr.com/>

esquerdo@edustatspr.com

(787)-764-0000-x4686

Curriculum Vitae

Academic Preparation

J.D. 2003, Magna Cum Laude, Syracuse University, Technology Law, Intellectual Property, Certificates on Law and Technology Management; Law and Market Economy. 3.504 GPA. Class Rank: 28 out of 247.

Ph.D. Mathematics (Statistics) 1983, University of California, Santa Barbara. Group Testing, Linear Models, Experimental Design, Mathematical Statistics.

M.A. Economics 1981, UCSB. Microeconomics, Operations Research, Econometrics.

M.A. Statistics 1980, UCSB. Mathematical Statistics.

Certificate, Cartography, 1977, Defense Mapping School, Fort Belvoir, VA. Over 200 hours on Photogrammetry, Geodesy, Surveying, Map Production, Aerial Photo Interpretation.

Graduate Program Mathematics 1976-77, University of Puerto Rico, Río Piedras, completed all M.A. coursework and exams. Algebra, Draft Thesis on Lattice Theory.

B.S. Mathematics, 1976, Magna Cum Laude. UPR, Río Piedras. Elective courses on Political Science, Sociology, Education, Economics, Physics, Art, Music.

Honors

2000-2003 University Fellow; Airport Fellow. Dean's List second semesters 2000-2001; 2001-2002, both semesters 2002-2003. First in class in the courses of: Legislation and Policy (Environmental Law); Law and Market Economy; Patent Prosecution. Elected to Justinian Honor Society. Syracuse University.

1983 1983 edition of Who's Who in California.

1983 – 1984 American Statistical Association - Census Bureau – National Science Foundation Research Associate.

1982 – 1983 Graduate Fellow, UCSB.

1979 – 1982 Scholarship of the President of the UPR.

1978 – 1982 Campus Fellow, UCSB.

1973 – 1977 UPR Honor's Scholarship.

Work Experience

Teaching

8/84 - Tenured Full Professor, Department of Mathematics, UPR, Río Piedras.

1/02 – 5/02 Adjunct Instructor, Onondaga Community College, teach undergraduate course on Discrete Mathematics.

9/78 - 7/83 Department of Mathematics, UCSB. Adjunct Lecturer, Associate, Teaching Assistant.

- 9/82 - 6/83 Departments of Mathematics and of Computer Science, Santa Barbara City College, Adjunct Instructor. Hold Instructor Credentials on Economics and Mathematics from the California Community Colleges, 1982
- 8/76 - 5/77 Department of Mathematics, UPR, Teaching Assistant.
Summer 87,89 Resource Center for Science and Engineering (RCSE).
Summer workshop and Saturday follow up sessions for High School Teachers of Mathematics.
- 1986-87 RCSE Summer Camp and Saturday Academy for High School Students.
Summer 85,86,88 Faculty research sponsor to two high school students.

Graduate courses taught

Mathematical Statistics, Probability, Linear Models, Independent Studies, Projects in Applied Mathematics, Group Testing, Ranking and Selection, Sampling Techniques, Statistical Quality Control, Statistical Inference. Operations Research (Graduate School of Business at UPR), Advanced Data Analysis and Experimental Design, Copyright Issues in Information Science (Graduate School of Information Sciences and Technology).

Undergraduate courses taught

Probability and Mathematical Statistics, Statistics for students majoring in communications, health sciences, Computer programming in Fortran, BASIC and Pascal, Calculus, Pre-calculus, Mathematics for Teachers, Remedial Mathematics, The Computer in the Economic Analysis (College of Social Sciences), Probability and Statistics (College of Business Administration).

Research Positions

- 2002-2003 Research Assistant, Technology Transfer Research Center, Syracuse University.
- 8/83 - 8/84 U. S. Census Bureau, Washington D. C., Mathematical Statistician (Research Associate) in joint Census Bureau-ASA research program funded by NSF.
Dynamic Discrete-Continuous Macroeconomic Modeling
- Summer 81 Minicars, 55 Depot Road, Goleta, California. Research Assistant. Statistical modeling of automobile accidents.

Consulting

- 9/80 - 6/82 Statistical Consulting Laboratory, UCSB, Research Assistant, Research Associate.
Consultant to PhD Dissertations in Education, Biology and English.
- 3/92 - 6/92 Workshops on Statistical Quality Control, GTE Sylvania, Humacao, Puerto Rico.
Consultant to several MS and Phd Theses at UPR and UCSB.

Administrative

- 8/03 – 5/04 Campus Academic Advisor on Technology, Office of the Dean for Academic Affairs, and Office of the Chancellor.
- 12/00 – Member of the academic board of the country level domain [dot-PR](#).
- 5/93 – 7/96 Project Director, Puerto Rico Statewide Systemic Initiative, Resource Center for Science and Engineering, UPR. Responsible for a Mathematics and Science Reform Initiative. Coordinated with the P.R. Department of Education and the P.R. General Council on Education. Budget of over \$24 million in 5 years.
- 1/93 - 5/93 Acting Dean for Academic Affairs, UPR Rio Piedras
- 8/91 - 1/93 Associate Dean for Academic Affairs, UPR, Rio Piedras
Among other duties, supervise the Library System, Office of the Registrar, Computational Laboratory for Faculty, Faculty Improvement Fund and university Professional Schools; President, Campus and UPR System Academic Computing Committees.
- 8/88 - 8/91 Assistant Dean for Academic Affairs, UPR, Rio Piedras. Supervise faculty appointments, responsible for university accreditation reports.
- 8/85 - 8/88 Coordinator of the UPR Graduate Program in Mathematics.

Other

- 1997- present Webmaster, designer, , Design, maintain and provide content and economic support for statistics website at: www.edustatspr.com.
- 2005-07 Translator, [Quantum, Inc.](#), English to Spanish translation of legal and technical documents, Some Spanish to English translation.
- 1996-98 Partner, Statistician-Evaluator, EMAEDUC Inc. Evaluation of Educational Projects. SJ, PR, 1996-98.
- 8/77 - 9/78 Cartographer, Mathematician Defense Mapping Agency, 6500 Brookes La., Washington D.C.

Committees

- Advisory Board, College Board, Office of PR and Latin American Activities, 1993-96.
- Graduate Program Mathematics (President), 8/85 - 8/88.
- Graduate Affairs Mathematics, 8/87 - 8/88.
- Graduate Mathematics Curriculum, 8/85 - 12/86.
- Undergraduate Mathematics Curriculum, 8/85 - 8/89; 2005 - present.
- Graduate Mathematics Examination, 8/84 - 8/89, 2005 - present
- Liaison Committee with the College of Education, 8/87 - 8/89.
- Auctions Committee, UPR Río Piedras, 1990-1994
- Personnel Committee Dept. of Mathematics, UPR, Río Piedras, 9/2003 – present.
- Campus Technology Board, 9/2003-2005.

Research

- *Implicaciones del Copyright y Fair Use para la Educación a Distancia*, with Purísima Centeno Alayón, Simbiosis, Avances en Educación a Distancia, Vol.1, Num 2, Año 2004, ISSN 1548-3436, en <http://egcti.upr.edu/simbiosis/>.
- *Espacios del Recinto de Río Piedras en la Web: Una evaluación preliminar, 2004*, available at <http://daarrp.uprrp.edu/daa/otros/Espacios del RRP en la Web.pdf>.
- *Clash of the Titans: Congress Meets the First Amendment in the 1996 Communications Decency Act*, available at <http://www.edustatspr.com/Profesor/trabajos/ChildOnlineProtectionAct-paper.pdf>
- *Winery-Brewery Business Plan, 2002*, available at <http://www.edustatspr.com/Profesor/trabajos/Winery Brewery Bussines Plan.pdf>
- *Brazilian Elections, 2002*, at http://www.edustatspr.com/Profesor/trabajos/essay_Brazilian_elections.pdf
- *Conflict Between Arbitration and Forum Selection Clauses*, available at http://www.edustatspr.com/Profesor/trabajos/forum_arbitration_clauses.pdf
- *Compact Flash and the Demise of Smartmedia, 2002*. available at http://www.edustatspr.com/Profesor/trabajos/Compact_Flash_Paper.zip
- *Class notes and materials*, available at <http://www.edustatspr.com/Materiales/probabilidad/index.php>, and at http://www.edustatspr.com/Materiales/Stats_text/index.php.
- *Estadística Descriptiva: una introducción conceptual al análisis de datos*. August 1997, Principal author, with Ana H. Quintero and Gloria E. Vega. Editorial Autores Puertorriqueños. Río Piedras. (adopted as High School textbook by the Puerto Rico Department of Education).
- *Group Testing* conference at SUNY, Buffalo, July 1981.
- *Group Testing* conference at UC Riverside, May 1983.
- *Group Testing to Identify the Sample Minimum of a Uniform Discrete Distribution* (Ph.D. Thesis, 1983, Milton Sobel, advisor).
- *Inspection of Related Variables*. *Quality Assurance* 1984, Vol. 10, No. 1, pp 9-11, (with L. Pesotchinsky).
- *Group Testing to Identify the Sample Minimum* (with M. Sobel and F. K. Hwang) US Census Bureau SRD Report. 1984 ASA annual conference, Philadelphia.
- *Estimation of Continuous Vector Autoregressive Models*. Software and documentation, US Census Bureau SRD Report, 8/84.
- *The Optimal Solution to the Generalized Group Testing Problem* (with Carlos Martín) Presented at the X Conference on Scientific Research, 2/86. SJ, PR. Invited plenary paper at the Third Interuniversity Seminar of Mathematics Research. April 16, 1988, Cayey.
- *Simulating Discrete Time Data from a Continuous Vector Autoregressive Model*. UPR Dept of Mathematics Technical Report, 1987.
- *Optimal Multinomial Group Testing*, Presented at the 1987 meeting of NSF-MRI researchers, Washington DC, 3/87.
- *On Simulating the Normal Distribution*. 1987, UPR Dept of Math Tech Rep.
- *Introduction to Descriptive Statistics*. 1987, UPR Dept of Math Tech Rep.
- *Introduction to Counting and Probability*. 1987, Dept of Math Tech Rep.

- *Multivariate CUSUM Procedures*. (with Nidza Vicente), presented at the Third Interuniversity Seminar on Mathematics Research, 4/16/88, Cayey.
- *Experiences in the Development of a Mathematics Workshop for High School Teachers*, with Nancy Costas. Presented at the First Interuniversity Seminar for the Teaching of Mathematics, Jan. 1988.
- *The Economic Design of Control Charts*. (with Gloria Vega), Presented at the Fourth Interuniversity Seminar on Mathematics Research, February 1989.
- Chaired Bayesian Methods Session, August 1984, ASA meeting, Phil., PA.

Projects And Grants

- Group Testing to Identify the Sample Minimum*. FIPI, UPR 1985-86.
- Multinomial Group Testing*. FIPI, UPR 1987-88.
- Optimal Multinomial Group Testing*. NSF planning grant, 10/86 - 7/88.
- Optimal Multinomial Group Testing*. NSF EPSCoR group proposal, accepted 8/86
- Mathematics Equipment*. 8/87 (O. Moreno, director) Group Testing computational proposal to NSF for a minicomputer, Alliant F/X-8.
- Group Testing Plans for Acceptance Sampling*. FIPI, U.P.R., 1989-90.
- Entendiendo los que hacemos: Estadísticas para todos*. Council on Higher Education, Summer 1994.

M.A. Thesis Supervised

- Segundo Díaz Meléndez, *Quality Control Techniques for the Mean of Two Correlated Variables*.
- Carlos Martín Torres, *The Optimal Solution to the Generalized Group Testing Problem*.
- Ileana Arroyo, *Group Testing for Isolating a Single Defective*.
- Nidza Vicente, *On the Distribution of the CUSUM Run Length*.
- Tawfig Abuosba, *Multinomial Group Testing*.
- Gloria Vega Rodríguez, *The Economic Design of Control Charts*.
- Maria I. Ripol, *Exploratory Methods for Quality Control*.
- Evelyn Dávila, *Group Testing Plans for Acceptance Sampling*.

In the M.A. Thesis Committees of

Walter Cedeño, Wilfredo Martínez, Rosa López, Nilda Santiago, Maria de Jesús, Anneliese Sánchez, Agda Cordero, Victorio Jauregui, Ivelisse Rubio, Nestor Mendoza, Lihai Song, Brenda Betancourt, Lourdes Vazquez, Jairo Fuquene.

Languages And Computer Skills

Fluent in English and Spanish, can read French. Knowledge of several computer languages and specialized packages (MS Office, Minitab, Systat) as well as with Internet and Web technology. Use Dreamweaver, Flash, Fireworks, Javascript, PHP, MySQL, HTML, XHTML.

Relevant Activities

- Collaborator with the [Instituto de Estadísticas de Puerto Rico](#), 2007-present.
- Academic Senator, elected (2006-2009) as Faculty Representative for the College of Natural Sciences, member of Committee on Academic Affairs.
- Senate representative, Junta de Disciplina, elected 2007-2008.
- Presidente Junta Consultiva Reacreditación Universidad del Este, Consejo de Educación Superior, 2006 to present.
- Resident Faculty on Technology, Center for Academic Excellence, UPR Rio Piedras Campus, 1999-2000.
- Papers presented at local and national meetings on the National Assessment of Educational Progress tests on Mathematics and Science for Puerto Rico, Estimation of Continuous Vector Autoregressive Models, Group Testing to Identify the Sample Minimum, Quality Control of Related Variables, Teaching with Technology.
- Puerto Rico Standards Committees for Science, Mathematics, Assessment and Professional Standards, member, 1993-1996.
- Workshops for mathematics and science K-12 teachers. Designed and conducted workshops. 1993-1997.
- Workshop on Statistics for Research, Oct 21, 28 2005. Asociación Profesional Estudiantes Graduados UPR.
- Design of the 1990 and 1995 UPR Rio Piedras Accreditation Self-Study. Prepared and edited drafts of Follow-Up Report to the Middle States Association, 1989, Mid Point Review Report, 1995 and Self Study Design, 1995.
- Advisory Committee, Hispanic Educational Telecommunications System, Learning Anytime Anywhere Partnerships (LAAP) Program, UPR 1999-2000,
- Advisory Board, College Board, Office of Puerto Rico and Latin American Activities, 1994-97. Gold Certificate of Recognition for distinguished collaboration.
- President of the Puerto Rico Action Committee, Regional Alliance for the Improvement of Education in Science, Mathematics and Technology, 1993-97.
- Board of Directors, Regional Alliance for the Improvement of Education in Science, Mathematics and Technology, Cambridge, Massachusetts, 1993-97.
- Academic Computing Symposiums. Presided over the organization of for the UPR Rio Piedras Campus (1990) and UPR System (1992).