

Jose Pabon

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EDUCATION

New Jersey Institute of Technology

Graduation date exp: June 2024

Ph.D. Candidate in the Mathematical Science department, G.P.A. 4.0. - Spring 2020.

Coursework: Analysis of Real and Complex Variables, Lp spaces, Lebesgue Theory, Measure Theory, Numerical Analysis, Thermodynamics and Physics, Dynamical Systems, Chaos, O.D.E., P.D.E., Computer Science including Matlab, Java, Latex, Python programming as well as related courses regarding the teaching mathematics.

Princeton University

Graduation date: June 2019

A.B. Degree in Mathematics, Center for Information Technology Policy Certificate, Program in Latin American Studies Certificate.

Coursework: Honors Advanced Multivariable Calculus, Honors Advanced Chemistry, Organic Chemistry, Analysis of Real and Complex Variables, Game Theory, Abstract Algebra, Numerical Analysis, Thermodynamics and Physics, Molecular Biology, Computer Science including Java programming as well as related humanities courses regarding the history of these disciplines.

Extracurricular Activities: Princeton Math Club, Mentoring Moebius, Princeton U. Mathematics Competition, McGraw Center Tutor, Aquinas Institute, Outdoor Action, Acción Puertorriqueña and Princeton Latinos and Amigos, N.J.I.T. chapter of the Society of Hispanic Engineers, and Newman Catholic Center.

Standardized Tests Scores – S.A.T. 1450/1600 (Perfect 800 Math Score) 99% Percentile, G.R.E. {(327/340), G.R.E. (5.5/6.0 Analytical Writing)} 97% Percentile, T.O.E.F.L. 120/120 99% Percentile.

INDEPENDENT RESEARCH

Thesis: A Game of Prones: How prone are cryptocurrency users to fraud? An expanded game theory model of the cryptocurrency mining market. Thesis Advisors: Prof. Miklos Racz, Prof. Fernando Coda Marques.

Grade received: A \ A-

- Interdisciplinary work at the intersection of Blockchain, Game Theory, Cryptocurrency and related disciplines.
- Also fulfilled the research requirements for certificate programs, the Princeton equivalent of a minor degree.

January 2018 through January 2019

Ph.D. Research Preprint: An iterated map model of active matter with classical slender body theory.: How much energy can swimmers save by selecting their formations and flight patterns? A new, more precise model of the collective hydrodynamics of active matter Thesis Advisors: Prof. Anand Oza, Prof. Michael Siegel.

- Experimental validation data available via established collaborations at N.Y.U. Courant Math Lab.
- Also working to derive fast numerical schemes with efficient compute and memory usage.

January 2019 through ongoing

INTERESTS/ LOOKING FOR OPPORTUNITIES IN:

Interdisciplinary programs or positions at the intersection of cutting-edge technology with theoretical mathematics. Looking to develop innovative solutions to complex academic technical problems of vast scope using advanced engineering, scientific and mathematical principles. Research, design and guide the implementation of new technologies ensuring new techniques and mathematical models are derived.

EXPERIENCE

Ph.D. candidate, Recitation Instructor, Grader, New Jersey Institute of Technology July 2019 through present

- Recitation of various Calculus I and Calculus II courses in various semesters.
- Tutoring of undergraduates including MATLAB and related computer assisted learning.
- Grading of examinations, problem sets and projects.
- Sole executor of configuration of online course via Canvas platform, including quizzes, problem sets, pdf presentations and other online learning materials.

Chief Technology Officer, Reclaim Energies, Keller Center, Princeton University. March 2018 through Sept. 2019

- Ensured N+2 redundancy of all systems and full compliance with industry leading regulations e.g. ISACA, FISMA and HIPAA.
- Authored method of operations procedures, code of conduct, technical and other documentation and led outreach of various interdepartmental projects.
- Engaged highest level of government management for state and federal infrastructure for negotiation on business opportunities.

Datacenter Administrator, AT&T

March 2000 through January 2018

- Exempt management appointment accountable for 500+ server racked installations, network cabling, HVAC environment and electrical connections in a 10,000 sq. ft. Datacenter. Ensured N+2 redundancy of all systems and full compliance with industry leading regulations e.g. ISACA, FISMA and HIPAA.
- Authored method of operations procedure documentation and led their corresponding various interdepartmental projects cradle to grave.
- Real time incremental and full backup solution EMC Dell Avamar implementation via high speed Storage Area Networks; audited backups and their policies to ensure data integrity and datastore optimization.
- Tier 4 highest level escalation contact for troubleshooting carrier grade telecommunications equipment.

ACTIVITIES

Professional Development: Princeton University McGraw Tutoring Center, Princeton Association for Computing Machinery member, Code@Nights, PuzzleMasters, Triangle Club, P.U. Players and Hack Princeton experience.

Volunteer work: Tutoring experience as Princeton University Math department assistant and grader for which I held office hours; Kensington, Philadelphia Soup Kitchen weekly volunteer, St. Paul's Catholic, Newman Club

SKILLS

Languages: Fluent in English, Spanish and conversational French, as well as Java, Matlab, Markdown, Python and LaTeX.

Certifications:

- BroadWorks Certified Operational Engineer, Voice over I.P. and Cloud-based unified communications and collaboration focused.
- Computing Technology Industry Association (CompTIA) Network Plus Administrator.
- AT&T Six Sigma program Orange Belt, Green Belt.

Technology:

- Carrier grade enterprise systems and equipment administration, including:
 - Oracle Acme-Packet Session Border Controllers model 4600, 3850, 3250.
 - Nortel Passport Switch model 8006 and 8010
 - VMWare ESXi virtual platform on IBM hardware.
 - Nagios Icinga SNMP trap monitoring, as well as fault monitoring on IPv4, IPv6 and Cisco nets.
 - Cisco Ironport model c170 and c370, mail SORBS blacklist and whitelist rep. management.
 - Windows active directory, group and organizational unit policy implementations.
 - D.N.S. and D.H.C.P. system protocols on large scale, public facing networks.
 - Pointsec physical and logical disk encryption.
 - O.S. management including Linux (bash distros), Sun Solaris, Windows.
 - Windows PowerShell scripting including batch active directory automation.
 - Packet tracing (Wireshark) of TCP/IP and VoIP datagrams; related traffic and security analysis.
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References available upon request.