MARIA OFELIA CLARISSA Z. SAN PEDRO

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SUMMARY

An educational researcher with a background in computer science, cognitive science, and education with interests in learning analytics, data science, learning sciences, and educational technology. Over 7 years of experience in educational data mining and learning analytics research that leverages technologies in K-12 education. A team player with proven leadership abilities, solid written and oral communication skills, and a strong publication record.

EDUCATION

TEACHERS COLLEGE, COLUMBIA UNIVERSITY — New York, NY
Ph.D., Cognitive Science in Education — May 2016
Research Concentration in Learning Analytics and Educational Technology

ATENEO DE MANILA UNIVERSITY — Quezon City, Philippines
M.S., Computer Science — March 2011

ATENEO DE MANILA UNIVERSITY — Quezon City, Philippines
B.S., Electronics Engineering, graduated *cum laude* — March 2005

WORK EXPERIENCE

ACT, INC. — Iowa City, IA
Research Scientist, Learning, Assessment, & Navigation Experiences Research — August 2016 – Present

- Develop and implement research-initiated project proposals in the learning sciences and learning analytics.
- Conduct design evaluation in the assessment development process of ACT-related products or services.
- Collaborate in thought leadership and research on approaches to learning science and learning analytics.

TEACHERS COLLEGE, COLUMBIA UNIVERSITY — New York, NY
Doctoral Research Fellow — September 2012 – June 2016

- Modeled long-term student outcomes (i.e. post-secondary education) from their middle school usage of an educational software.
- Conducted intensive data processing, modeling and analysis of large datasets of fine-grained educational data mined from multiple databases.
- Published and presented research papers in local and international academic conferences.
- Mentored new graduate students.

NYC DEPARTMENT OF EDUCATION — New York, NY
Assessment Technology Summer Intern (Research Intern) — June 2015 – August 2015

- Evaluated usability of an alternative open-source digital-based assessment platform for potential adoption in NYC public schools.
- Implemented and customized Math and ELA assessments within a digital-based assessment platform.

WORCESTER POLYTECHNIC INSTITUTE — Worcester, MA
Graduate Research Assistant — August 2011 – August 2012

- Applied machine learning tools to fine-grained data mined from the database of an educational software.
- Facilitated pilot of survey data collection for a federally funded grant.

ATENEO DE MANILA UNIVERSITY Quezon City, Philippines
Graduate Student Researcher, Ateneo Laboratory for the Learning Sciences April 2010 – April 2011

- Implemented student models on student interaction data from an intelligent tutoring system.

POINTWEST INNOVATIONS CORPORATION Makati City, Philippines
Software Engineer June 2006 – June 2009

- Executed business analysis, software development and software quality assurance for various business applications of different system platforms.

ACCENTURE MANILA DELIVERY CENTRE Mandaluyong City, Philippines
Software Test Lead (Contractor) December 2006 – March 2008

- Led the entire test phase design of a year-long new product project involving multiple technology groups.
- Managed various testing support requests of client on newly installed products.

CANON INFORMATION TECHNOLOGIES Quezon City, Philippines
Quality Software Engineer (Industry Practicum) April 2004 – May 2004

- Conducted functional testing of Bluetooth devices for Canon products.

COMPUTER SKILLS

PROGRAMMING LANGUAGES:	R, Java, Python (Basic)
STATISTICAL/DATA MINING TOOLS:	SAS, SPSS, MPlus, RapidMiner, Weka, Matlab
DATABASE:	MySQL
WEB DEVELOPMENT:	HTML, CSS, PHP, Javascript (Basic)
PRESENTATION:	Flash, Powerpoint
SOFTWARE ENGINEERING:	Software Quality Assurance, Software Design and Development

HONORS AND AWARDS

DOCTORAL RESEARCH FELLOWSHIP, TEACHERS COLLEGE, COLUMBIA UNIVERSITY (2012-2016)
FINALIST, 2015 NAED/SPENCER DISSERTATION FELLOWSHIP

SELECTED PUBLICATIONS

Sanchez, E., Moore, R., & **San Pedro, M.O.Z**. (2018). *Investigating test prep impact on score gains using quasi-experimental propensity score matching.* Iowa City, IA: ACT.

San Pedro, M. O. Z., Baker, R. S., & Heffernan, N. T. (2017). An Integrated Look at Middle School Engagement and Learning in Digital Environments as Precursors to College Attendance. *Technology, Knowledge and Learning,* 22(3), 243-270.

San Pedro, M.O.Z., Baker, R.S. (2016) Adaptive Learning. In McCarthy, M. (Ed.) *The Cambridge Guide to Blended Learning for Language Technologies*, pp. 234-247

Ocumpaugh, J., **San Pedro, M. O.**, Lai, H. Y., Baker, R. S., & Borgen, F. (2016). Middle School Engagement with Mathematics Software and Later Interest and Self-Efficacy for STEM Careers. *Journal of Science Education and Technology*, 1-11.

San Pedro, M.O.Z., Snow, E.L., Baker, R.S., McNamara, D., Heffernan, N. (2015) Exploring Dynamic Assessments of Affect, Behavior, and Cognition and Math State Test Achievement. In *Proceedings of the 8th International Conference on Educational Data Mining*, 85-92. ***(presented paper)***

Snow, E.L., **San Pedro, M.O.Z.**, Jacovina, M., McNamara, D.S., Baker, R.S. (2015) Achievement versus Experience: Predicting Students' Choices during Gameplay. In *Proceedings of the 8th International Conference on Educational Data Mining,* 564-565.

San Pedro, M. O. Z., d Baker, R. S., & Rodrigo, M. M. T. (2014). Carelessness and Affect in an Intelligent Tutoring System for Mathematics. *International Journal of Artificial Intelligence in Education*, 24(2), 189-210.

Pardos, Z.A., Baker, R.S., & **San Pedro, M.O.C.Z.**, Gowda, S.M., Gowda, S.M. (2014) Affective states and state tests: Investigating how affect and engagement during the school year predict end of year learning outcomes. *Journal of Learning Analytics*, 1 (1), 107-128.

San Pedro, M.O.Z., Baker, R.S.J.d., Bowers, A.J., & Heffernan, N.T. (2013) Predicting College Enrollment from Student Interaction with an Intelligent Tutoring System in Middle School. *Proceedings of the 6th International Conference on Educational Data Mining, 177-184.* ***(presented paper)***

San Pedro, M.O.Z., Baker, R.S.J.d., Gowda, S.M., & Heffernan, N.T. (2013) Towards an Understanding of Affect and Knowledge from Student Interaction with an Intelligent Tutoring System. *Proceedings of the 16th International Conference on Artificial Intelligence and Education, 41-50*. ***(presented paper)***