Nicko Reginio Caluya

Augmented Reality • Interactive Learning • Training & Educational Environments

Doctor of Engineering, Interactive Media Design Laboratory, NAIST

Mobile: +81 080-7856-4181 Birthday: February 14, 1993

email: nickocaluya@gmail.com Birthplace: Muntinlupa City, Philippines

SITE 1: http://nickocaluya.github.io Nationality: Filipino

Education & Employment

2021-present Researcher, Interactive Media Design Laboratory

2018-present Doctor of Engineering, Interactive Media Design Laboratory
2016-2018 Master of Engineering, Interactive Media Design Laboratory
Nara Institute of Science & Technology (NAIST), Japan

Researcher, Ateneo Laboratory for the Learning Sciences

Assistant Instructor, Department of Information Systems & Computer Science

Ateneo de Manila University, Philippines

Junior Programmer, Skillshot Labs, Taguig City, Philippines

2009-2013 Bachelor of Science in Computer Science

Specialization in Interactive Multimedia & Games, Minor in Literature-Filipino

Ateneo de Manila University (ADMU), Philippines

Grants, Honors & Awards

2016-2021 Scholarship Recipient (International Priority Graduate Programs)

Ministry of Education, Culture, Sports, Science & Technology, Japan

Merit Scholarship Program Award, Asia Pacific Society for Computers in Education

2009-2013 Scholarship Recipient (Merit B Category), Department of Science & Technology, Philippines

2009-2013 Financial Aid Scholar (100% Tuition Fees, Dormitory Fee, & Allowance)

Ateneo Alumni Scholars Association & Office of Admission & Aid, Ateneo de Manila University

Loyola Schools Awards for the Arts, School of Humanities, Ateneo de Manila University

Teaching

2013

2016DGDD 150.1Special Topics in Game Studies: History in Digital Games2014b, 2015aCS 30Introduction to Information Technology2014c, 2015bCS 177Introduction to Computer Graphics Programming

2014-2015a CS 179.4 Special Topics in Interactive Multimedia: 3D Modeling & Animation

Languages

English TOEIC: 990/990 • TOEFL: 104/120
Japanese Basic Knowledge
Filipino (Tagalog) First, Native Language

Scientific Publications & Conferences

- Nicko R. Caluya, Alexander Plopski, Christian Sandor, Yuichiro Fujimoto, Masayuki Kanbara, and Hirokazu Kato, "Does Overlay Field of View in Head-Mounted Displays Affect Spatial Memorization?" Computer and Graphics, in press. pp. 1-8. dx.doi.org/10.1016/j.cag.2021.09.004 (Journal)
- Nicko R. Caluya, Yuichiro Fujimoto, Masayuki Kanbara, and Hirokazu Kato, "Influencing Driving Speed Using Perception-Based Augmented Reality," In Proceedings of the Asia Pacific Workshop on Mixed and Augmented Reality (APMAR '21). (Workshop Paper)
- Resty C. Collado, **Nicko R. Caluya**, and Marc Ericson C. Santos, "Teachers' Evaluation of Augmented Reality-Based Motion Graphing Motion," *Journal of Physics: Conference Series*, 1286, pp. 1-9. dx.doi.org/10.1088/742-6596/1286/1/012051. (Journal)
- Nicko R. Caluya and Marc Ericson C. Santos, "Kantenbouki VR: A Virtual Reality Authoring Tool for Learning Localized Weather Reporting," In Proceedings of the IEEE Conference on Virtual Reality & 3D User Interfaces (IEEE VR '19), Osaka, Japan, pp. 866-867. dx.doi.org/10.1109/VR.2019.8798216 (Poster)
- Eric Cesar E. Vidal, Jr., Jayzon F. Ty, **Nicko R. Caluya**, and Ma. Mercedes T. Rodrigo, "MAGIS: Mobile Augmented-reality Games for Instructional Support," *Interactive Learning Environments* 28(6), pp. 895-907. dx.doi.org/10.1080/10494820.2018.1504305 (Journal)
- Nicko R. Caluya, Alexander Plopski, Jayzon F. Ty, Christian Sandor, Takafumi Taketomi, and Hirokazu Kato, "Transferability of Spatial Maps: Augmented Versus Virtual Reality Training," In Proceedings of the IEEE Conference on Virtual Reality & 3D User Interfaces (IEEE VR '18), Reutlingen, Germany, pp. 387-393. dx.doi.org/10.1109/VR.2018.8447561 (Conference Paper)
- Resty C. Collado, **Nicko R. Caluya**, and Marc Ericson C. Santos "Teachers' Evaluation of Augmented Reality-Based Motion Graphing Motion," In Proceedings of the *International Conference on Physics Education* (GIREP-ICPE-EPEC '17), Dublin, Ireland. (Conference Paper)
- Ma. Mercedes T. Rodrigo, **Nicko R. Caluya**, Eric Cesar E. Vidal, Jr., Jenilyn L. Agapito, and Walfrido David A. Diy III. "Usability Study of an Augmented Reality Game for Philippine History," Paper, In Proceedings of the *International Conference for Computers in Education*, Mumbai, India. (Conference Paper)
- Eric Cesar E. Vidal, Jr., Jayzon F. Ty, **Nicko R. Caluya**, and Ma. Mercedes T. Rodrigo. "MAGIS: Mobile Augmented- reality Games for Instructional Support," In Proceedings of the 3rd Asia-Europe Symposium on Simulation & Serious Gaming (VRCAI '16). ACM, New York, NY, USA, pp. 191-194. (Conference Paper)
- Ma. Mercedes T. Rodrigo, **Nicko R. Caluya**, Walfrido David A. Diy III, and Eric Cesar E. Vidal, Jr. "Igpaw: Intramuros Design of an Augmented Reality Game for Philippine History," Paper, In Proceedings of the International Conference for Computers in Education, Hangzhou, China. (Conference Paper)
- Nicko R. Caluya and Juan Carlos G. Mapua. "Developing a Real-time Tactics Game Using an Optimized Cost-Effective Eye-Tracking Device," *Philippine Computing Science Congress*, Manila, Philippines. (Poster)

Programming Knowledge

*recently and/or frequently used

- 2012- C# for Unity (Games Design & Development)*
- 2012- Python* for Math & Linear Algebra Applications, Pandas (Data Manipulation and Analysis)
- 2016- WebGL, R* for Statistical Analysis
- 2011- C++ for Computer Graphics Programming (OpenGL)
- SPSS for Statistical Analysis
- C for ARToolkit, Objective-C for iOS
- C for Linux/Unix Operating Systems
- 2010- MySQL for Database Management Systems, Java for Data Structures & Algorithms

Service & Internships

Reviewer, Virtual Reality Software and Technology

Reviewer, Interactive Learning Environments

Intern, Humans Interacting with Computers at University of Primorska (HICUP Lab) (Koper, Slovenia)

2019, 2020 Student Volunteer and Reviewer, (Osaka, Japan); Reviewer (Virtual); IEEE Virtual Reality

Organizer (Logistics, Web Design), NAIST Project for Interns (for Ateneo de Manila University
Student Volunteer and Reviewer, SIGGRAPH ASIA 2015 (Kobe, Japan), 2018 (Tokyo, Japan)
Intern, Remote Internships for Young Researchers - Weathernews Inc. (Chiba-shi, Japan)
Intern, Ateneo Laboratory for the Learning Sciences (ADMU) &
Interactive Media Design Laboratory (NAIST) Joint Internship for Augmented Reality

Talks & Demonstrations

- Jun 2016 "The Role of Architecture in an Augmented Reality Game for Philippine History", for Architectural Students' Association of the Philippines UP Chapter, RealityX: A Virtual Reality Experience, Quezon City, Metro Manila, Philippines.
- Sep 2015 "Mixed Reality: Virtual and Augmented Reality Technologies and Applications", for Manresa School, Paranaque City, Metro Manila, Philippines.
- Feb 2015 "Designing and Developing An Augmented Reality Game for Philippine History", for Philippine Society of Information Technology Students-Western Visayas (PSITS-WV), Kapis Mansions, Roxas City, Capiz, Philippines.
- "3D Modeling & Animation", for University of the Philippines Association of Computer Science Majors (UP CURSOR) Computer Science Summit 1.0, Quezon City, Metro Manila, Philippines.
- Oct 2014 "Computer Games & Affective Computing", for Immaculate Conception Academy, Mandaluyong City, Philippines.
- May 2013 "Authoring Editable AR Content on Paper Bills", Nara Institute of Science & Technology, Nara, Japan.
- ^{**}Developing a Real-time Tactics Game Using an Optimized Cost-Effective Eye-Tracking Device.", Ateneo de Davao University, Davao City, Philippines.

(Miscellaneous) Literary Publications & Workshops

- Nicko Reginio Caluya, "Mga Nagpapahinga / Bodies at Rest / 静止している物体", "Pagkilatis kay Derek", *TLDTD Issue No. 2.*
- Nicko Reginio Caluya, "Riddle", 49 Philippine-Language Poets in Translation, The Loch Raven Review.
- Nicko Reginio Caluya, #NOVISION2020 for Curare Art Space.
- Nicko Reginio Caluya, Nasa Loob ang Kulo: Selected Haikai, 2013-2019.
- Nicko Reginio Caluya, "Kinakalinga", *In Sight of Sharks: A Literary and Artistic Collection for Shark Awareness*, Makati City: Marine Wildlife Watch of the Philippines.
- Nicko Reginio Caluya, "Soneto 80", "Inhenyeriya", "Arrangements", *Heights* Vol. LXV No. 1, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "Umuulan sa Lupang Arenda", "Alinlangan", *Heights* Vol. LXI No. 2, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "Local Express", "Shinsaibashi-suji", "Ligaw na Salin", "Mga Usa ng Todaiji", "Takayama", Heights Vol. LXI No. 1, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "Regular Expressions", "Tanaw Mula sa Punta Fuego", "Pasintabi kay Feynman", "Balanse", *Heights* Vol. LX No. 4, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "Gemini", Heights Vol. LX No. 2, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "Manman", "Babala", "Dayuhan", "Being Erasure", *Heights* Vol. LX No. 1, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "[I believe in nothing. Just.]", "Digmaan", Heights Vol. LIX No. 2, Quezon City: Ateneo de Manila University.
- Fellow, 11th Ateneo National Writers' Workshop. Quezon City, Metro Manila, Philippines.
- Nicko Reginio Caluya, "Aquarius", "Erehe", "Paliwanag", Heights Vol. LIX No. 1, Quezon City: Ateneo de Manila University.
- Nicko Reginio Caluya, "7 Minuto ng Kasalanan", *Heights* Vol. LVII No. 2, Quezon City: Ateneo de Manila University.
- Fellow, 16th Ateneo Heights Writers' Workshop. Antipolo City, Rizal, Philippines.