Nicko Reginio Caluya

Augmented Reality • Interactive Learning • Training & Educational Environments Assistant Professor, Visual Information Engineering Laboratory, Ritsumeikan University

Mobile: +81 070-9050-6245 Birthday: February 14, 1993

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

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

Education & Employment

Researcher, Interactive Media Design Laboratory 2021-2022 Doctor of Engineering, Interactive Media Design Laboratory 2018-2022 Master of Engineering, Interactive Media Design Laboratory Nara Institute of Science & Technology (NAIST), Japan Researcher, Ateneo Laboratory for the Learning Sciences 2014-2016 Assistant Instructor, Department of Information Systems & Computer Science Ateneo de Manila University, Philippines Junior Programmer, Skillshot Labs, Taguig City, Philippines 2013-2014 Bachelor of Science in Computer Science 2009-2013 Specialization in Interactive Multimedia & Games, Minor in Literature-Filipino

Ateneo de Manila University (ADMU), Philippines

Grants, Honors & Awards

Scholarship Recipient (International Priority Graduate Programs) 2016-2021 Ministry of Education, Culture, Sports, Science & Technology, Japan Merit Scholarship Program Award, Asia Pacific Society for Computers in Education 2016 Scholarship Recipient (Merit B Category), Department of Science & Technology, Philippines 2009-2013 Financial Aid Scholar (100% Tuition Fees, Dormitory Fee, & Allowance) 2009-2013 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

2012-

Ritsumeikan University

Computer Graphics 35491 2022 Imperative Programming Practice (C) 35601 2022 32996 Programming Practice 1

Ateneo de Manila University

DGDD 150.1 Special Topics in Game Studies: History in Digital Games 2016 Introduction to Information Technology CS 30 2014b, 2015a Introduction to Computer Graphics Programming CS 177 2014c, 2015b Special Topics in Interactive Multimedia: 3D Modeling & Animation CS 179.4 2014-2015a

Programming Knowledge

*recently and/or frequently used

C# for Unity (Games Design & Development)*

Python* for Math & Linear Algebra Applications, Pandas (Data Manipulation and Analysis) 2012-

- 2016- WebGL, R* for Statistical Analysis
- 2011- C++ for Computer Graphics Programming (OpenGL)
- SPSS for Statistical Analysis
- ²⁰¹³⁻ C for ARToolkit, Objective-C for iOS
- ²⁰¹¹⁻ C for Linux/Unix Operating Systems
- 2010- MySQL for Database Management Systems, Java for Data Structures & Algorithms

Languages

English Japanese Filipino (Tagalog)

2019

TOEIC: 990/990 • TOEFL: 104/120 Basic Knowledge 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)

Service & Internships

2023	Session Chair and Panel Moderator, Special Se	ssion on AR/VR, Human Vision and Electronic Imaging (HVEI)

Reviewer, Human Factors in Computing Systems(CHI)

Reviewer, International Symposium on Mixed and Augmented Reality (ISMAR)

Reviewer, Virtual Reality Software and Technology
Reviewer, Interactive Learning Environments

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

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

Feb 2015

Oct 2014

May 2013

Feb 2013

2022

2021

May 2022 "Newer Fields of View: Perceptual and Performance Effects in XR Across Disciplines", for the Ateneo Laboratory for the Learning Sciences Lecture Series, online.

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.

"Computer Games & Affective Computing", for Immaculate Conception Academy, Mandaluyong City, Philippines.

"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 Eve-Tracking Device.". Atene

"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 translates Edgar Calabia Samar, "No Deity of Fire", "Corner", "Folktale", ANMLY 35

"Kognisyon: Contemporary Philippine Literature in Translation.

Nicko Reginio Caluya, "Katawan Ko ang Eskaparate at Kalansay ng Aking Nakaraan ang Laman", *Heights* Vol. LXIX No. 2, Quezon City: Ateneo de Manila University.

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.

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