

# Nicko Reginio Caluya

Augmented Reality • Interactive Learning • Games Design & Development • Computer Graphics

*Doctor of Engineering*, Interactive Media Design Laboratory

Division of Information Science, Graduate School of Science & Technology

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SITE 1: <http://nickocaluya.wordpress.com>

SITE 2: <http://fireflights.github.io>

Birthday: February 14, 1993

Birthplace: Muntinlupa City, Philippines

Hometown: San Pedro City, Laguna, Philippines

Nationality: Filipino

## Education & Employment

2018-present	<i>Doctor of Engineering</i> , Interactive Media Design Laboratory
2016-2018	<i>Master of Engineering</i> , Interactive Media Design Laboratory Nara Institute of Science & Technology (NAIST), Japan
2014-2016	Researcher, Ateneo Laboratory for the Learning Sciences Assistant Instructor, Department of Information Systems & Computer Science Ateneo de Manila University, Philippines
2013-2014	Junior Programmer, Skillshot Labs, Taguig City, Philippines
2009-2013	<i>Bachelor of Science</i> 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
2016	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
2013	Loyola Schools Awards for the Arts, School of Humanities, Ateneo de Manila University

## Service & Internships

2019	Intern, Humans Interacting with Computers at University of Primorska (HICUP Lab) (Koper, Slovenia)
2019	Student Volunteer, IEEE Virtual Reality (Osaka, Japan)
2018	Student Volunteer, SIGGRAPH ASIA 2018 (Tokyo, Japan)
2018	Intern, Remote Internships for Young Researchers - Weathernews Inc. (Chiba-shi, Japan)
2015-2016	Moderator, Microsoft Student Community - Ateneo de Manila University (Manila, Philippines)
2015	Student Volunteer, SIGGRAPH ASIA 2015 (Kobe, Japan)
2013	Intern, Ateneo Laboratory for the Learning Sciences (ADMU) & Interactive Media Design Laboratory (NAIST) Joint Internship for Augmented Reality
2012	Intern, ThinkTank Software Labs (Makati City, Philippines)

# Programming Knowledge

## PROFICIENT EXPERIENCE

2012- C# for Unity (Games Design & Development)  
2011- C++ for Computer Graphics Programming (OpenGL)

## BASIC EXPERIENCE

2016- SPSS for Statistical Analysis  
2016- WebGL, R for Statistical Analysis  
2013- C for ARToolkit, Objective-C for iOS  
2011- C for Linux/Unix Operating Systems  
2012- Python for Math & Linear Algebra Applications  
2010- MySQL for Database Management Systems, Java for Data Structures & Algorithms

# Teaching

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

# Scientific Publications & Conferences

2019 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. (Journal)

2019 **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. (Poster)

2018 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. 1-13. (Journal)

2018 **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. (Paper)

2017 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. (Paper)

2016 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. (Paper)

2016 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. (Paper)

2015 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. (Paper)

2013 **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)

## 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.
- Feb 2015 “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.
- Feb 2013 [“Developing a Real-time Tactics Game Using an Optimized Cost-Effective Eye-Tracking Device.”](#), Ateneo de Davao University, Davao City, Philippines.