

Education

- Aug 2011 – May 2013 **University of Illinois at Chicago**, Chicago, IL
- Master of Science in Computer Science – Human-Centered Computing
 - Fulbright Scholar
 - Overall GPA: 4.0/4.0
- Aug 2002 – Jun 2008 **Universidad San Francisco de Quito**, Quito – Ecuador
- Bachelor of Science in Electrical/Electronic Engineering
- Aug 2004 – May 2005 **University of Illinois at Urbana Champaign**, Urbana, IL
- One year in an International Student Program at the College of Engineering

Experience

- April 2021 – Present **Dorfjungs**, Karlsruhe – Germany / www.dorfjungs.com
Freelance Creative Front End Developer
- Responsible for developing web components, creating interactions and animations, improving performance, and fixing bugs on clients' websites.
- April 2017 – January 2021 **NIDO Interactive**, Quito – Ecuador / www.nidointeractive.com
Co-founder, Creative Technology Director
- Responsible for rapid prototyping, selecting tech stack and supervising the development of web, mobile, ar and vr, interactive installations projects for more than 50 clients.
- Sep 2014 – Present **Universidad de las Américas**, Quito – Ecuador
Assistant Professor, Multimedia and Interactivity Department
- Responsible for introductory and advanced classes teaching programming within the visual arts, multimedia and interactive design context.
- Sep 2014 – 2017 **átiko7**, Quito – Ecuador / www.atiko7.com
Full stack creative developer consultant
- Responsible for developing interactive prototypes and products that generate new user experiences by bridging the gap between digital and analog spaces.
 - Mentor (Open Hardware Hackathon & Space Apps Challenge – *Buen Trip Hub*)
- Jan 2015 – June 2015 **Universidad San Francisco de Quito**, Quito – Ecuador
Part Time / Assistant Professor, Multimedia and Interactivity Department
- Responsible for teaching an advanced interactive products class within a visual arts, multimedia and interactivity context.
- Sep 2013 – Aug 2014 **University of Illinois at Chicago**, Chicago, IL
Academic Researcher, Learning Technologies Group at the Electronic Visualization Laboratory (EVL)
- Re-designing and implementing a location based tracking system using Bluetooth Beacon (Estimote® and Gimbal®) technology.
 - Designed and implemented a Microduino®-based system to remotely control LED lights for a classroom oriented representation of gerbils' foraging behavior data.
- Jun 2013 – Aug 2013 **Ketai LLC.**, Chicago, IL / <http://ket.ai>
Software Engineer
- Responsible for expanding Ketai's Processing/Android open source software library networking functionalities.
 - Responsible for Radio-Frequency Identification applications development.
 - Developed software to automate tube-rolling based on information extracted from 3D modeling software.
- May 2012 – May 2013 **University of Illinois at Chicago**, Chicago, IL
Research Assistant, Learning Technologies Group at the Electronic Visualization Laboratory (EVL)
- Developed a physical interface for natural phenomena visualization using Arduino-based tangible robots guided by a Java controlled graphics display and C++ fiducial tracker.
 - Responsible for the development of a Java network monitoring application for an Active RFID location tracking system to be used in classroom embodied games and animal tracking projects.
 - Performed the analysis of learning technologies' physicality affordances and the relationship between proximity and engagement in classroom-oriented activities (Contribution to AERA 2013 paper submission).

Jun 2009 – May 2011 **Universidad San Francisco de Quito**, Quito – Ecuador

Robotics Research and Development Center

- Installed, programmed and managed Intelitek's OpenCIM system. C++ controlled milling and turning machines as well as three industrial robots that were part of the OpenCIM system.
- Introduction to Robotics class Teaching Assistant and Interface Design Lab Assistant (Fall 2010).
- Robotics Lab Research Assistant, Lab Instructor.
- Undergraduate Students' Research Projects Coordinator. Projects coordinated: USFQ's Underwater ROV and USFQ's Explorer Robot.

Jan 2009 – Jun 2009 **Nokia Siemens Networks**, Quito – Ecuador

CARE Services Junior Engineer Trainee

- Handled technical support cases and helped with the initial networking equipment setup for Quito's 3G mobile networks as part of the GPRS mobile network CARE team.

Publications

- Alessandro Gnoli, Anthony Perritano, Paulo Guerra, Brenda Lopez, Joel Brown, and Tom Moher. *"Back to the future: embodied classroom simulations of animal foraging."* In Proceedings of the 8th International Conference on Tangible, Embedded and Embodied Interaction, pp. 275-282. ACM, 2014.
- Nicolás Soria, Daniel Cabrera, and Paulo Guerra. *"Design and Construction of a ROV(Remotely Operated Vehicle) Submarine USFQ"*. In Avances En Ciencias e Ingenierías, 2014.
- Guerra Figueiredo, Paulo. *"RemoteBunnies: Multi-Agent Data Mapping Between Physical Environments."* In Proceedings of the 8th International Conference on Tangible, Embedded and Embodied Interaction. 2013.
- Paulo Guerra, Brenda López, Alessandro Gnoli, and Tom Moher. *"Embedded Phenomena for Inquiry Communities (EPIC), Proximity and engaged participation in WallCology"* – Structured Poster Session at the American Education Research Association Annual Meeting 2013.

Academic Honours

- Fulbright Foreign Student Program Grantee (August, 2011- May, 2014).
- Tangible, Embedded, and Embodied Interaction conference - Graduate Student Consortium participant (TEI - Barcelona, Spain. 2013).
- Summa Cum Laude (Universidad San Francisco de Quito, June 2008).
- Dean's List (University Of Illinois at Urbana-Champaign, Spring 2005).
- Chancellor 's List (Universidad San Francisco de Quito, 2003, 2004, 2005, 2006 & 2008).
- Isaac Newton Academic Excellence Scholarship Award (Universidad San Francisco de Quito, August 2002).

Skills

Technical Skills

- Web Development
 - CSS, HTML5, Javascript, Wordpress, NuxtJS, ThreeJS
- Interaction Design
 - Electronics, Motion Control, Tangibles, Sensors, RFID, Arduino, Physical Computing, Virtual Reality.
- SoftwareTools
 - Unreal Engine, Unity, Processing, openFrameworks, Arduino IDE, Ableton Live, PureData, Adobe Suite, LabVIEW.

Non-Technical Skills

- Languages
 - Spanish - *mother tongue*.
 - Portuguese.
 - English.

Other Interests

- Woodworking • Biking • Diving • Capoeira Angola • Music

For additional details about my projects and experience please refer to pauloguerraf.dev