

Bruno Senzio-Savino Barzellato

Researcher | Embedded Systems Engineer | Mixed Reality and AI Developer | Innovator

Interdisciplinary researcher and engineer with experience spanning embedded systems, brain-computer interfaces, robotics, mixed reality, signal processing, and AI-driven interactive systems. Experienced in both academia and industry across Japan and Mexico, with published research, patented technologies, and international engineering experience.

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https://github.com/Bsenzio https://bsenzio.github.io/portfolio/index.html

RESEARCH AND TECHNICAL SKILLS

Embedded Systems	Machine Learning	C, ASM	Signal Classification
Brain-Computer Interfaces	Computer Vision	Electronics Design	Research Prototyping
Mixed Reality	Unity3D	Hardware Systems	
Robotics	Python, MATLAB	HCI/HMI	

EDUCATION

M.S. in Information Engineering

University of the Ryukyus 2015 – 2017 Okinawa, Japan

- Research focus: EEG signal processing and brain-computer interfaces
- Recipient of the Graduate School Dean Award

B.S. in Mechatronics Engineering

National Autonomous University of Mexico (UNAM) 2006 – 2011 Mexico

- Recipient of the Faculty of Engineering Best Student Award
- Thesis on remote experimentation systems and instrumentation

MBA

Quantic School of Business and Technology 2019 – 2020 Remote

Graduate Studies in Advanced Technologies

University of Advanced Technologies 2020 – Expected 2026 Remote

PROFESSIONAL EXPERIENCE

Chief Technology Officer

SenzioTek 2024 – Present Japan / Mexico

Keywords: AI, Robotics, Mixed Reality

- Leading R&D initiatives in mixed reality environments and interactive systems
- Developing novel hardware and software platforms integrating AI and immersive technologies
- Coordinating prototyping and patent-oriented technology development

Senior Hardware Engineer

Capgemini 2022 – 2024 Mexico

Keywords: Embedded Systems, Automotive, Hardware Engineering

- Developed and validated advanced hardware systems for enterprise engineering projects
- Worked on embedded and high-reliability electronic systems

Specially Appointed Professor

University of Advanced Technologies 2021 – 2022 Japan

Keywords: Research and Education

- Conducted advanced technology research and mentoring activities
- Participated in interdisciplinary engineering projects

Dedicated Field Applications Engineer

Arrow Electronics 2020 – 2021 Japan

Keywords: Semiconductors, Embedded Systems

- Supported enterprise customers in advanced semiconductor and embedded solutions
- Provided technical consulting and engineering integration support

Research Intern

Advanced Telecommunications Research Institute International (ATR) 2017 – 2018 Kyoto, Japan

Keywords: Brain Signals, AI, Human Interfaces

- Conducted research on EEG processing and interactive systems
- Collaborated on machine learning and human-interface technologies

SELECTED PUBLICATIONS

- Senzio-Savino B., Alsharif F. *Vegetables, Enemies, and Emergence: A Playable Game of Life on Nintendo for Educational Purposes*. Innovations in Machine Intelligence, 2026.
- Senzio-Savino B., Alsharif MR., Gutierrez CE., Setarehdan K. *An Online Synchronous Brain Wave Signal Pattern Classifier with Parallel Processing Optimization for Embedded System Implementation*. International Journal of Advanced Computer Science and Applications, 2017.
- Senzio-Savino B., Alsharif MR., Gutierrez CE., Yamashita K., Setarehdan K. *Brain Wave Pattern Classification: Towards the Design of an Effective Online Classifier*. European Journal of Information Science and Technology, 2016.
- Senzio-Savino B., Alsharif MR., Gutierrez CE., Yamashita K., Noble J. *Path Detection in Virtual Environment for Synchronous EEG by Density-Based Support Vector Machine*. Journal of Information and Communications Engineering, 2015.

PATENTS AND INTELLECTUAL PROPERTY

- **Mixed Reality Environment Generation Technology** Patent Application MXa2025009159, Mexico, 2025.
- **Matrix-Type Electromagnetic Conversion System** Patent Application MXa2023002399, Mexico, 2023.
- **Biological Signal Processing Device** Patent No. 388756, Mexico, 2018.

AWARDS AND HONORS

UNAM Faculty of Engineering Best Student Award
2010

Japanese MEXT Scholarship
2014

Graduate School Dean Award
University of the Ryukyus, 2017

LANGUAGES

Spanish
Native

Italian
Conversational

English
Professional Fluency

Japanese
Business / Research Level

RESEARCH INTERESTS

Artificial Life
Brain-Computer Interfaces
Mixed Reality Systems

Human Augmentation
Interactive AI Systems
Educational Technologies

Game Development
Edge AI