Ian Dos Reis e Aragão

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Sao Paulo, SP, Brazil, Rua Machado Bittencourt

EDUCATION BACKGROUND

Bachelor's and Degree in Information Systems, 2019 (GPA 3.50)
The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

PROFESSIONAL EXPERIENCE

Entrepreneur Leadership (08/2018 – 02/2022)
Intelligent Architecture arq|int / Construction /Architecture / Real State / Technology - Sao Paulo, SP, Brazil

- Founding Partner and Lead Developer at ArqInt, spearheading entrepreneurial activities and driving technological innovation.
- Innovated business processes by integrating advanced technologies, improving operational efficiency and client engagement.
- Developed scalable business strategies, resulting in a 30% increase in client acquisition and retention.
- Conducted comprehensive market analysis, identifying customer pain points and tailoring VR solutions accordingly.
- Presented VR solutions at industry conferences, increasing brand visibility and attracting investment opportunities.
- Established strategic partnerships with furniture companies, integrating virtual staging into VR environments and boosting sales.
- Reduced natural resource waste by eliminating physical showrooms, contributing to sustainability and cost savings.
- Achieved recognition in national and international entrepreneurship competitions, showcasing technological advancements, innovation potential, and a commitment to sustainability.

Virtual Reality Development (08/2018 – 02/2022)
Intelligent Architecture arq|int / Construction + Architecture / Real State / Technology - Sao Paulo, SP, Brazil

- Spearheaded the development of advanced Virtual Reality software, revolutionizing the real estate sales process.
- Created immersive virtual experiences, allowing potential buyers to explore properties in a realistic and interactive environment.
- Enhanced client presentations and sales pitches with interactive VR demonstrations, leading to increased client satisfaction and sales conversion rates.
- Managed a cross-functional team to create immersive VR environments, driving a 30% increase in client acquisition and retention.
- Conducted rigorous testing and quality assurance to ensure VR environments met high standards of realism and interactivity.
- Authored detailed technical documentation and user guides, facilitating seamless client training and adoption.
- Transformed architectural designs into high-definition VR simulations using Unreal Engine, streamlining the sales process and setting new industry standards.

RESEARCH EXPERIENCE

The Development of an Anthropomorphic Mechanical Arm (01/2018 – 10/2019)
Scientific Initiation Project, Advisor Ph.D. Humberto Sandmann
The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Designed and developed a functional anthropomorphic mechanical arm, incorporating advanced robotics and mechanical engineering principles.
- Applied IoT technologies to enhance the arm's functionality and integration with other devices.
- Conducted rigorous testing and analysis to ensure precision and reliability.
- Presented findings at academic conferences, showcasing innovative contributions to assistive technologies.

Virtual Reality Project (08/2018 – 06/2019)
Undergraduate Final Project, Advisor Master. Mauricio Pimentel
The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Developed an immersive VR application to enhance educational tools for virtualization.
- Conducted user experience testing to improve interactivity, accessibility, and user engagement.
- Conducted rigorous testing and analysis to ensure precision and reliability.
- Authored a comprehensive project report detailing VR implementation's technical and theoretical aspects.

Brain-Computer Interface: A New Frontier for Human-Machine Interactions (01/2017 – 12/2017)
Scientific Initiation Project, Advisor Ph.D. Humberto Sandmann
The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Researched and developed a Brain-Computer Interface system, focusing on enhancing human-machine interactions.
- Employed EMG to capture and analyze biological signals, translating them into actionable commands.
- Investigated the potential applications of BCI technology in assistive devices and neurotechnology.
- Published findings in academic journals, contributing to my department's research advancement.

ACADEMIC APPOINTMENTS

Undergraduate Research Projects (Scientific Initiation) (01/2017 – 10/2019)
The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Published research findings in well-regarded scientific journals, contributing to the university's academic prestige and influence.
- Received recognition and awards for outstanding research contributions, highlighting the university's commitment to academic excellence.
- Organized and led research seminars and workshops, increasing student engagement and participation in academic research.

Virtual Reality Room Project   (02/2018 – 06/2019)

The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Designed and developed a state-of-the-art Virtual Reality Room students utilize for immersive learning experiences.
- Leveraged advanced VR technologies to create interactive and engaging educational simulations.
- Facilitated the adoption of VR in educational settings, significantly improving student engagement and learning outcomes.

Power Lab Initiative   (02/2017 – 12/2017)

The Higher School of Advertising and Marketing (ESPM), Sao Paulo, SP, Brazil

- Established Power Lab for hands-on learning and experimentation for undergraduate researchers.
- Equipped the lab with advanced tools and technologies to support student projects and research initiatives.
- Fostered an environment of experimentation and discovery, contributing to the academic growth of students and researchers

LABORATORY TECHNIQUES

- **Programming & Software Development**: Proficiency in Java, Python, C/C++; develop, test, and deploy robust software applications; design web solutions with HTML, CSS, JavaScript, React, and Angular; create mobile applications for Android platforms.
- **Game Engine & VR Development:** Engineer interactive games using game engines; engineer interactive, immersive VR environments, creating experiences for educational and practical applications.
- **Cybersecurity & Network Administration:** Configure and manage network infrastructure; implement cybersecurity protocols; conduct penetration testing and ethical hacking for security assurance.
- **Human-Computer Interfaces:** Analyze user requirements to design efficient information systems; design user-friendly interfaces through advanced Human-Computer Interfaces (HCI) principles; immerse users in new computer experiences interacting with human senses.
- **IoT & 3D Printing**: Develop IoT applications for home automation and integrate connecting devices to enhance daily routine. Build a 3D-printed arm as a practical application of Arduino for prosthetics studies.
- **AI & Machine Learning:** Apply basic knowledge of machine learning algorithms and AI concepts to enhance software functionality and user experiences.
- **BCI Research & Development:** Lead research and development of Brain-Computer Interface (BCI) systems; utilize EMG to capture and analyze biological signals; process brain signals into actionable information for innovative brain-controlled applications.

- **Assistive & Cost-Effective Technologies:** Innovate accessibility solutions; research demographics of people with disabilities (PcDs) in Brazil; develop assistive technologies and engineer low-cost solutions to meet diverse needs.
- **Project Management & Proof of Concept Development:** Manage project timelines and deliverables; ensure successful coordination among stakeholders; create proofs of concept to demonstrate feasibility; conduct cross-disciplinary research to drive innovation.

SOFTWARES PROFICIENCY

- **Development Tools:** Git, GitHub, GitLab, Visual Studio Code, Eclipse, IntelliJ IDEA.
- **Mobile Development**: Android Studio.
- **Game Development**: Unity, Unreal Engine
- **Virtual Reality**: Unreal Engine VR.
- **IoT Platforms**: Arduino IDE, Raspberry Pi
- **3D Modeling**: Autodesk Maya
- **Graphic Design**: Photoshop, Adobe Illustrator.
- **Cybersecurity Tools**: Wireshark, Kali Linux

LANGUAGES PROFICIENCY

- **Portuguese:** Native Fluent.
- **English:** Advance Proficiency.
- **Japanese:** Intermediate Proficiency.
- **Spanish:** Basic Proficiency.

SCHOLARSHIPS & AWARDS

Scientific Initiation Research Fellowship (08/2016 – 06/2019)
Projects and Research Support Office (EPAP) by ESPM, Sao Paulo, SP, Brazil.

Recipient of the Prestigious Research Excellence Award (10/2019)
8th Scientific Initiation Seminar (SEMIC) by ESPM, Sao Paulo, SP, Brazil

First Place at the Entrepreneurship Fair (09/2018)
XII Entrepreneurship Fair by ESPM, Sao Paulo, SP, Brazil

Honored with ESPM Business Incubator Grant (10/2018)
ESPM'S Business Incubator, Sao Paulo, SP, Brazil

Top 50 Startups in the Country (05/2019)
University Entrepreneur, Empreenda 2019 by Santander, Sao Paulo, SP, Brazil

Most Promising Startups (08/2019)
Nominated by Empreenda as one of the most potential Startups in the country by Santander, Brazil.

Represent Brazil in Santander X Global (10/2019)
Represent Brazil in the invitation-only Santander X Global Award by Santander, Brazil.

CONFERENCE PARTICIPATION

"*The Development of an Anthropomorphic Mechanical Arm*", **Aragão**, Ian D. Reis. 8th Scientific Initiation Seminar of The Higher School of Advertising and Marketing (8th SEMIC-ESPM), Francisco Gracioso Campus, São Paulo – SP, Brazil, October 2019. (Talk and Scientific Conference Proceeding)

"*Brain-Computer Interface: A New Frontier for Human-Machine Interaction*", **Aragão**, Ian D. Reis. 7th Scientific Initiation Seminar of The Higher School of Advertising and Marketing (7th SEMIC-ESPM), Francisco Gracioso Campus, São Paulo – SP, Brazil, October 2018. (Talk and Scientific Conference Proceeding)

"*Mechanical Arm Demonstration - TECH*", **Aragão**, Ian D. Reis. DEV², August 2018, ESPM, São Paulo, Brazil. (Talk and Scientific Demonstration)

PUBLICATIONS

Aragão, Ian dos Reis e. "**A New Human-Machine Interaction**". Electronic Resource. (103 p.) Final report of the Scientific Initiation Project The Higher School of Advertising and Marketing (ESPM). Sao Paulo-SP. 2017**.**

Aragão, Ian dos Reis e. "**Brain-Computer Interface: A New Application for Human-Machine Interaction**" Electronic Resource (16 p.) Article VII Scientific Initiation Seminar ESPM. São Paulo-SP. 2018.

Aragão, Ian Dos Reis e. "**The Development of an Anthropomorphic Mechanical Arm**". Electronic resource (67 p.) Final report of the Scientific Initiation Project of The Higher School of Advertising and Marketing (ESPM). Sao Paulo-SP. 2019.

Aragão, Ian dos Reis e. "**The Development of an Anthropomorphic Mechanical Arm**". Electronic Resource (16 p.) Article VIII Scientific Initiation Seminar ESPM. São Paulo-SP. 2019.

Aragão, Ian Dos Reis e. ; Magnani, Carlos A. B. D. ; Martins, Matheus A. ; Prado, Lucas C. ; Basso, Pedro Guilherme M. R. "**Virtual Reality Project**" (*In Portuguese*) Electronic resource (84 p.) Course Conclusion Paper (Graduation Thesis) – The Higher School of Advertising and Marketing (ESPM), Information Systems Course, São Paulo, 2019.

INTERNATIONAL EXPERIENCE

Summer English Course / Cultural Exchange Program (07/2013 – 08/2013)
Converse International School of Languages on the campus of Yale University
Yale University, New Haven, CT 06520, EUA