Danilo Castro

Software Engineer, XR Expert

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Project Portfolio: www.danilocastro.com   linkedin.com/in/danilocastro

Background

Software Engineer with 21 years of experience designing and delivering digital innovations for finance, telecom, manufacturing, retail, and e-commerce. Architect and managed impactful B2B software digital transformations in Brazil within Accenture, Itaú S/A, Nextel, SKY TV, Natura&Co and Kimberly-Clark.

Architecting and delivering AR/VR applications for Games and the Industrial segment for 10 years.

Startup founder recognized as "Best AR/VR company" in 2019 and 2020 in LATAM 100 OpenStartups Ranking. Brazil's Chapter President for VR/AR Association, currently holding an advisory position.

Education

Master's Degree in Applied Virtual Reality to GNV Distribution   Nov/2019 ~ Dec/2021
Instituto Gnarus (Brazil)   www.institutognarus.com.br

Digital Marketing Specialization   Nov/2016 ~ Mar/2017
University of Illinois Urbana-Champaign   https://illinois.edu/

MBA in IT Strategy Planning   Jan/2010 ~ Dec/2011
FGV – Fundação Getúlio Vargas (Brazil)   portal.fgv.br

Project Management Specialization   Jan/2009 ~ Dec/2009
FIA – Fundação Instituto de Administração (Brazil)   https://www.fiaonline.com.br/

Bachelor in Electronic Engineer   Jun/1996 ~ Jun/2001
Universidade Federal de Itajubá (Brazil)   unifei.edu.br

Languages

- Portuguese: Native
- English: Proficient (C2)
- Spanish: Elementary (A2)

Tech Skills

Development Languages:
- Proficient in C#, C++, Python, Dart, and JavaScript for diverse applications from web development to software engineering and automation.

Frontend Development:
- Advanced HTML, CSS, and JavaScript skills for dynamic UIs.

Mobile Development:
- Cross-platform development with Flutter, including UI design via Flutterflow. Native Android development expertise in Kotlin and Java.

Industry Systems:
- Specialized in C# and .NET SDK for API integrations with SAP and Oracle EBS.
- Experienced in WMS and MES system integrations using custom C# and dotNET SDKs, APIs, SQL schemas, and triggers for Siemens and ABB systems.
- ArcGIS database for mapping integration used in logistics and factory building cost evaluations.

Gaming and XR Development:
- Unity expert for Mobile, PC, and VR. Skilled in AR/XR with 8th Wall, Vuforia, A-Frame, and WebGL for immersive experiences.

Cloud Services:
- AWS expertise in Lambda, IAM, Elasticsearch, Elastic Beanstalk, S3, and Rekognition. Google Cloud and Azure proficiency, including Cloud Run, Firebase, Google Maps, Roads, Azure Functions, and Cognitive Services.

Containerization & Orchestration:
- Docker and Kubernetes for containerization and orchestration, ensuring system scalability and reliability.

Databases:
- Database design and management with MySQL, MariaDB, and Google Cloud Firestore, incorporating SQL schemas and triggers for efficient data handling.

Integrated Development Environments (IDEs):
- Versatile in Visual Studio, VS Code, Android Studio, and Rider.
- Enhanced with CI/CD pipeline integration: UnityCloud, Heroku Pipeline, AWS CodeDeploy, Jenkis, Bamboo with Bitbucket.
- JMeter for performance testing, and NUnit for unit testing in .NET environments.

Project Management & Methodologies:
- Agile project management adept using JIRA, with proficiency in Scrum and Kanban.

Work Experience

Software Architect and Tech Lead
Nov/2022 ~ Current
Company: Strawberry Fields Interactive Inc. www.strawberryfields.ca

Responsible for solution design, team managing and technical architecture for the main VR product (Aexia) across multiple distribution platforms (Quest, SteamVR, SideQuest).

- Support technical high-level planning to long-term execution of all company's products.
- Solution design and management of the tech team towards maintaining code quality, clarity and stability align with the company's strategy and product roadmap.
- Lead and mentor the technical team to deliver world-class game solutions.

Software Engineer and XR Lead
Oct/2021 ~ Nov/2022
Company: Compass.UOL www.compass.uol

Leading the strategy, business and operations to the extended reality (XR) and metaverse business unity focusing on customer success in those initiatives.

- Responsible for managing 30 collaborators working all remotely delivering creative content and technical products.
- Create and manage international partnerships with world-class companies such Unity, AWS, Google, Zappar and Tencent.
- Manage sales teams in offerings and tech leads to improve delivery efficiency and quality towards world-class XR experiences.
- Development of new offerings, customer success, and technical frameworks to support creative and technical teams.

Software Engineer and Tech Manager
Jul/2017 ~ Oct/2021
Company: MondoDX (acquired by Compass.UOL) www.compass.uol

Developed and led teams of 3 to 5 people to deliver high quality digital products to big players in the market, in Brazil and US, such as: Kimberly-Clark, Indra Consulting, Bosch, DHL, JC Decaux, Veolia Water Tech, Ball Corporation, Borborema Energy Group, Motorola and Samsung.

- Responsible for customer success, application architecture, planning, lifecycle, dev tools, environment setup

and automation pipelines.

- VR application for collaborative, multiplayer prototyping tool for Product Designers, reducing 60% of costs related to people logistics and prototype materials.
- ABB MES and SAP ERP integration for point-cloud mapping for warehouses using iPad LiDAR cameras with slam features and geo-localization (ARFoundation). Improve audit tasks reducing 25% in dispatch errors.
- Oracle EBS integration for AR Wayfinding using ARFoundation and QRCode readers for Android and iOS smartphones to help navigation inside Malls and Parking lots.
- Digital-Twin for Hydroelectric Power-plant water drain integrated with Siemens MES system for Borb

Service and Software Manager   Sep/2014 ~ Jul/2017
Company: Compasso UOL   www.compasso.uol

Acted as project manager, key-account and customer success manager for enterprise applications and cloud transformations for SKY, Claro, Natura, CVC, Americanas and Globo, in a wide spectrum of applications ranging from on-premise data centers, Oracle EBS, billing and CRM systems to e-commerce web and mobile applications. Worked from pre-sales, sales, project and on-going operations phases.

- Responsible for architecture and managing outsourced development of e-commerce frontend/backend on Oracle Commerce and later migration to AWS for Natura&Co in Brazil, Argentina e Chile.
- Team management of backend development services and infrastructure monitoring for CVC, Americanas, Sky TV and Globo Network using AWS and Oracle EBS.

Technical Architect Consultant   Dec/2010 ~ Aug/2014
Company: Accenture   www.accenture.com

Acted as consultant Tech Architect in major digital transformations in Brazil, supporting architectural and technology roadmap decisions, leading near-shore and off-shore development teams and designing transitional applications for large-scale banking M&A in Brazil and LATAM.

- Responsible for Design and Lead the integration architecture (SOA and C++) for the 3G expansion of the Nextel Telco in LATAM
- Led a team of 25 developers spread in 2 software factories: Manila/Philippines and Recife/Brazil.
- Design and conduct technical technology analysis for credit card migration for major banking M&A in Brazil: Unibanco and Itaú.
- Managing implementation of cross-country SAP for Yamana Gold Mining in Chile, Brazil and Canada simultaneously.

Software Developer and Tech Lead   **Jun/2006 ~ Dec/2010**

Company: LSITEC   https://www.lsitec.org.br/

Started as software developer for custom mobile development in C language, and after 2006, added the role of Tech Lead responsible for teams of 5 to 7 people.

- Develop country adaptations, localization services, bug fixes and production hotfixes in all major mobile phones tiers, manufactured and sold by LG Electronics in the LATAM market: Brazil, Argentina, Chile, Panama, Uruguay, Paraguay, Colombia, Peru, Venezuela, Turks and Caicos, Jamaica, Guianas.
- Responsible for understanding every new model custom mobile architecture (monoliths and multitask OS) produced by South Korean Teams.
- Onboard and train the team towards modules and features, communicating failures or integration needs due to protocols or country limitations, resources needs (media and others) regarding localization differences, back to Korean headquarters.
- Responsible for code quality, CI/CD pipelines in integrating Korean and Brazilian codes. Delivering the final binary code, "ready-to-install" to the Brazilian manufacturer located in Sao Jose dos Campos, Brazil.
- Handling software life-cycles with hotfixes and reporting core changes needed detected in production.

Patents

- Method And System For Operation And Maintenance Using Digital Twin For Fish Lift Type Transposition System [BR1020210231092 · Filed Nov 17, 2021]

- Computational Platform In Virtual Reality And Georeferenced Method For Simulating The Logistic Planning Of Thermal Power Plants [BR1020210057491 · Filed Mar 25, 2021]

- Financial Analysis and Management Environment for Decision Making in Thermal Power Plants [BR512021000481-7 · Filed Mar 16, 2021]

Publications

- Virtual Reality Applied in a Thermoelectric Power Plant Planning. (Brazilian Archives of Biology and Technology, v. 64, 2022)

- Automatic Parking of a Vehicle using Fuzzy Logic, Genetic Algorithms and Computational Vision (ISA/Intech · Jun 10, 1999)

- Fuzzy Logic controller for an Hydroelectric Turbine on Itaipú Power Plant (SNPTEE · Sep 10, 1998)