Ivan Buccella

Mobile & Full Stack Developer
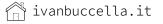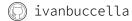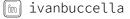
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EXPERIENCE

CENTRO RICERCHE E STUDI DEI LAGHI | MOBILE & FULL STACK DEVELOPER
Sep 2021 – Current | Milan, Italy (Remote)

➔ Design and development of complex mobile applications using Flutter and Dart, focusing on clean architecture and maintainable code.
➔ Implementation of reactive state management using `freezed`, `json_serializable`, and the `BLoC/Cubit` pattern to optimize data modeling and reduce boilerplate code.
➔ Management of the full app publishing lifecycle for both the Google Play Store and the Apple App Store, including the setup and maintenance of CI/CD pipelines using `Codemagic` to automate build, test, and release processes, ensuring compliance with guidelines and smooth, reliable deployments.
➔ Consumption and integration of RESTful JSON APIs using tools like `Retrofit` to enable seamless client-server communication in mobile applications.
➔ Support of back-end development with Laravel 12 and Symfony 5, including API design and business logic implementation.
➔ Development of interactive web interfaces using Vue 3 and Inertia.js as part of full stack responsibilities.
➔ Leadership of a development team, managing requirements, task allocation, and stakeholder communication, applying Agile/Scrum methodologies and leveraging DevOps tools to boost productivity.

BEE BY GROWENS | FULL STACK DEVELOPER
Apr 2020 – Aug 2021 | Milan, Italy (Remote)

➔ Development of new pages, plugins, and features for existing WordPress-based company websites.
➔ Integration of WordPress instances with RESTful APIs to enhance front-end functionality and dynamic content handling.
➔ Extension of back-end capabilities by modifying existing Django REST Framework endpoints and data models.

NINJA MARKETING | FULL STACK DEVELOPER
Oct 2019 – Apr 2020 | Salerno, Italy

➔ Development of new pages, plugins, and features for existing company websites built on WordPress and WooCommerce.

KIDIGITAL | FULL STACK DEVELOPER
Dec 2017 – Sep 2019 | Salerno, Italy

➔ Development of websites and e-commerce platforms using WordPress and WooCommerce.
➔ Customization of existing themes with hooks and filters, building custom themes, creating plugins, and designing custom post types and taxonomies.

PUBLICATIONS

[1] N. Lettieri, R. Zaccagnino, D. Malandrino, L. Lomasto, **I. Buccella**: Graph-Based Inference and Visualization to Delve into Gig Workers' Conditions.
In: 29th International Conference on Information Visualisation (IV 2025), 05–08 August 2025, Darmstadt University of Applied Sciences, Germany.

SKILLS

PROGRAMMING

Proficient:
Dart • PHP • SQL • HTML • CSS

Experienced:
JavaScript • Python

Familiar:
Java • C

LIBRARIES/FRAMEWORKS

Flutter • Laravel • Symfony • Django • Node.js • Vue • React • jQuery

TOOLS/PLATFORMS

Git • GitLab CI • Jenkins
Docker • Docker Compose
Shell scripting • Bash
AWS • Azure • GCP
MySQL • PostgreSQL
MongoDB • MSSQL
ClickUp • JIRA • Trello
Confluence

EDUCATION

MSc in Cloud Computing
UNIVERSITY OF SALERNO
Dec 2020 - Oct 2024 | Fisciano, Italy
Department of Computer Science
Final grade: 110/110 cum laude

BSc in Computer Science
UNIVERSITY OF SALERNO
Sep 2016 - Dec 2020 | Fisciano, Italy
Department of Computer Science
Final grade: 103/110

Member of EDGE Laboratory
UNIVERSITY OF SALERNO
Department of Computer Science

LANGUAGES

Italian: Native
English: Proficient

REFERENCES

References are available upon request.

PROJECTS

GIGADVISOR | CROWDSENSING & GRAPH NEURAL NETWORKS FOR GIG ECONOMY ANALYSIS

Available upon request

Designed and implemented research-driven modules for GigAdvisor, a cross-platform Flutter application supporting digital labor transparency. Developed an interactive graph-based interface using D3.js to explore relationships between platform behavior, contract features, and worker issues. Engineered a Temporal Graph Neural Network model to identify suspicious behavioral patterns in gig platforms and forecast emerging criticalities based on worker feedback over time. The project, part of my MSc thesis, integrates crowdsensing, network analysis, and GNNs to empower regulators and workers in assessing fairness and compliance in the gig economy.

NOTES SOUND GENERATOR | HAPTIC MUSIC PLAYBACK SYSTEM FOR VISUALLY IMPAIRED USERS

github.com/IvanBuccella/notes-sound-generator

Designed and built an assistive MuseScore plugin and mobile app for visually impaired users to play musical scores via vibration feedback. The plugin exports MusicXML from editable scores and streams note and beat data through WebSocket to a Flutter mobile app, which provides haptic feedback and visual cues. Architected a modular system using AlphaTab.js, Web Workers, and a custom PHP WebSocket server, fully containerized with Docker. Mobile app receives real-time MIDI note and time signature info, enhancing accessibility and usability during score playback.

CITY TRASH BOT | AI-POWERED TELEGRAM BOT FOR WASTE COLLECTION

github.com/IvanBuccella/CityTrashBot

Designed and deployed a conversational bot to help users manage household waste disposal through natural language and voice interaction on Telegram. Integrated Azure services including LUIS for intent recognition, Cosmos DB for persistent storage, and Azure Functions for scheduling daily email reminders. Implemented audio moderation and speech recognition with Azure Speech and Content Moderator, and orchestrated message flow with Service Bus. Fully deployable to Azure with CI-ready configuration.

CAM ALERT | SERVERLESS IOT SYSTEM

github.com/IvanBuccella/CamAlert

Designed and implemented a serverless IoT system to detect home camera motion events and notify users in real time via email alerts. Developed custom Nuclio functions in Node.js to handle MQTT streams, trigger emergency detection logic, and publish messages through RabbitMQ. Built and deployed the system with Docker, leveraging MongoDB for log persistence and alert tracking.