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10/06/1994

Paraguayan

≅ Profile

I'm a software engineer with 5+ years of experience building systems that actually work—secure, scalable, and built to solve real problems. I've contributed to projects across finance, CRM, and automation, always aiming for clean code and practical results.

I specialize in backend development with Node.js, Java (Spring Boot), C#, and SQL, but I'm also comfortable jumping into the frontend with React. I've led the development of microservices for things like reporting, authentication, and payment automation. I care about architecture, code quality, and making complex systems simple to work with.

Outside of tech, I'm into music (vinyl collector and concert-goer), dabble in game dev, and love to travel. Always open to new challenges where I can learn, build, and make an impact.

Education

02/2012 - 08/2020Asunción, Paraguay Universidad Católica Nuestra Señora de la Asunción

Graduated as Computer Science Engineer

Skills

- Programming Languages: Java, C#, JavaScript, TypeScript, Python, SQL, PHP
- Frontend Technologies: React.js, TypeScript, JavaScript, HTML5, CSS3, Ant Design, jQuery
- **Backend Technologies**: Node.js, Express.js, Java Spring, C#, Python
- Microservices & APIs: RESTful APIs, API Gateway, Apache Kafka, Swagger/OpenAPI 3.0, RabbitMO
- Databases & Data Management: MySQL, SQL Server, NoSQL (MongoDB, etc.), OpenSearch, PM2, ETL Pipelines
- Authentication & Security: Amazon Cognito, Azure Active Directory, Role-based Access Control (RBAC), Two-Factor Authentication (2FA), OTP Generation & Validation
- Cloud & Infrastructure: AWS, Docker, Kubernetes
- DevOps & CI/CD: Git, Jenkins, JIRA, Confluence
- **Testing & Quality Assurance**: Mocha, Chai, Sinon, Unit Testing, Test Coverage



Spanish English French

Description Professional Experience

fintech.works □

Sep 2024 – present

Hybrid (Asunción, Paraguay)

Technical lead and architect of projects for financial institutions. I design, build, and deliver robust web applications and backend microservices focused on automating recurring payment processing, secure authentication, reporting, audit logging, and user management.

Key responsibilities and achievements:

- **Enterprise Authentication Integration** Implemented secure login using Amazon Cognito with Azure Active Directory. Enabled corporate SSO with role-based access, improving onboarding, reducing friction, and aligning with enterprise security standards.
- **Backoffice UI Enhancements** Redesigned React + TypeScript admin interface using Ant Design. Added advanced filtering (URL-persisted), nested tables, collapsible sidebars, and real-time data rendering. Included export features (CSV/PDF) and UI performance optimizations.
- **Secure OTP Service** Built a Java + Spring service for OTP generation and validation, including encrypted storage, TTL-based expiration, and automated cleanup. Enforced secure coding standards and clean architecture.
- **C# Reporting Optimization** Refactored legacy scripts for PDF balance reports. Reduced memory usage and generation time by streamlining logic and formatting, enhancing usability for internal teams.
- **OpenSearch Query Service** Developed a scalable backend to handle large datasets using advanced filters, `search_after` pagination, and result caps. Enabled PDF/CSV export with minimal system load.
- **Pluggable Audit Module** Designed a logging system via API Gateway filters to capture and store user actions. Integrated session tracking, action whitelisting, and a searchable UI to trace activity across services.

Client engagement & leadership:

- Lead weekly client meetings, deliver time estimates, technical documentation, and detailed progress reports.
- Presented implemented solutions on-site to client executives, receiving strong feedback and helping drive future roadmap discussions.

Project: Test Automation Framework | Lead Back End Engineer

Software Engineer focused on backend development for large-scale test automation systems across distributed platforms. Contributed to the architecture, development, and maintenance of a modular, Kafka-based microservices ecosystem designed to orchestrate test workflows, manage results, and deliver structured reports.

Key responsibilities and contributions:

- **Backend Architecture & API Gateway** Developed and maintained backend services using Node.js, Express, and TypeScript. Incoming API requests were routed through a gateway and dispatched to microservices using Apache Kafka for asynchronous, scalable communication.
- **Service Layer & Controllers** Implemented logic to support complex operations such as test execution, result analysis, report generation, and CRUD for workflow entities—following clean architecture principles with controller-service separation.
- **Pluggable Data Access Layer** Designed and maintained a factory-based data access layer capable of handling diverse sources: SQL/NoSQL databases and third-party APIs. Sources are abstracted via individual mappings for flexibility and consistency.
- **Test Coverage & Code Quality** Wrote unit tests using Mocha, Chai, and Sinon to ensure 80%+ test coverage. Focused on maintainable, well-documented code aligned with team standards.
- **Agile Collaboration** Worked in a fully remote Agile team. Participated in daily stand-ups, backlog grooming, sprint planning, demos, and retrospectives. Tools: JIRA, Confluence, Zoom, Slack.
- **Documentation & Knowledge Sharing** Contributed to internal docs and onboarding materials to support new team members and maintain institutional knowledge.

Microtech SA Mar 2020 – Aug 2021 Hybrid (Asunción, Paraguay) Full Stack Engineer for CRM and enterprise systems integration projects. Led development of backend modules and cross-platform data workflows using Node.js, C#, SQL Server, and RabbitMQ. Worked closely with stakeholders to define business requirements, architect integrations, and maintain mission-critical infrastructure.

Key responsibilities and contributions:

- **Data Synchronization Engine** Designed and implemented a high-availability synchronization module using Node.js, RabbitMQ, and PM2 to transfer and reconcile data between two independent CRM systems.
- **API Development & Security** Built multiple RESTful web services with Express.js, hosted on Windows-based servers, and secured them via a custom API Gateway.
- **Server Configuration & Monitoring** Set up and maintained Windows servers running Node.js microservices, RabbitMQ brokers, and PM2 process managers for load balancing and fault tolerance.
- **Documentation & Standards** Authored API documentation using Swagger and OpenAPI 3.0 to standardize communication with frontend teams and CRM integrators.
- CRM & Scripting Developed JavaScript customizations for Microsoft Dynamics 365 to

extend business functionality and improve UX.

- **ETL Pipelines** Built and maintained C# + T-SQL ETL processes for data migration and transformation across multiple databases.
- **Database Architecture** Conducted schema analysis, SQL query optimization, and database design aligned to business requirements.
- **Stakeholder Collaboration** Gathered and translated business logic from domain experts into technical specifications.
- **Customer Support** Provided technical assistance and post-deployment support to end users, ensuring smooth system adoption.

Fiweex ☐ Apr 2019 – Jan 2020 On-site (Asunción, Paraguay)

Project: Fiweex | Full Stack Developer

Full Stack Developer focused on customer-facing web solutions, report automation, and CRM process enhancement. Designed and implemented multiple backend microservices and frontend functionalities using PHP, MySQL, and jQuery, improving operational efficiency and user experience.

Key responsibilities and achievements:

- **Customer Data Web Interface** Built a full-stack web application using PHP, MySQL, and jQuery to display real-time customer data, improving client visibility and interaction.
- **Automated PDF Report Generation** Designed and implemented a microservice that generates customized PDF reports using PHP and FPDF, streamlining internal reporting workflows.
- **Email Delivery of Reports** Developed a dedicated microservice to automatically email generated reports to clients, reducing manual overhead and enhancing communication efficiency.
- **Password Recovery Module** Implemented a secure password recovery system that generates unique tokens, validates user identity, and sends recovery instructions via email.
- **Web Services for CRM Integration** Created multiple RESTful APIs consumed by the CRM system to ensure seamless data exchange and integration across platforms.
- **Database Design and Optimization** Planned and developed new database structures and tables tailored for upcoming modules, ensuring performance and scalability.
- **Technical Support** Provided hands-on technical support to end users, resolving incidents and maintaining production system stability

Courses and Certifications

04/2025	Microsoft Certified: Azure Fundamentals <i>Microsoft</i>
12/2023	Understanding Typescript, Udemy
07/2022	EF SET English Certificate 77/100, EF Standard English Test