

# Juan Agustin Gregorieu

Montevideo, Uruguay | +598 9773 7635 | agustin.gregorieu@gmail.com

## EDUCATION

**Northeastern University**, Boston, MA, USA

Sep 2019 – May 2021

*Master of Science in Computer Science* - GPA: 4.00

***Fulbright Scholarship recipient, recognizing academic excellence.***

Completed graduate-level coursework including Large-Scale Parallel Data Processing, Information Retrieval, Algorithms, Machine Learning, Software Security, Computer Systems, and Artificial Intelligence.

### Notable Projects:

- **Truco AI:** Developed multiple AI agents for the strategic card game “Truco,” including a MiniMax agent with Alpha-Beta Pruning and a Q-Learning agent, demonstrating expertise in classical and reinforcement learning techniques.
- **Distributed K-Means:** Designed and implemented a scalable distributed K-Means clustering algorithm using Scala and Apache Spark, applied to analyze political Twitter datasets for pattern discovery.
- **Hacker News Search Engine:** Enhanced search result relevance by building a Solr-based indexer in Java for Hacker News posts, improving information retrieval efficiency.

**Universidad Tecnológica Nacional**, Córdoba, Argentina

Mar 2013 – Dec 2017

*Bachelor of Engineering in Information Systems Engineering* - GPA: 4.00

Completed foundational coursework in Algorithms and Data Structures, Systems Analysis, Software Engineering, Web Development, and Artificial Intelligence.

### Notable Project: PriHood

- Developed a hybrid mobile application to automate administrative and operational processes in Argentina’s gated neighborhoods using Ionic, Angular, C#, .NET Core, and MySQL.

## EXPERIENCE

**EngagedMD**, Washington, DC, USA (Remote – Montevideo, Uruguay)

Sep 2021 – Present

Senior Software Engineer & Technical Lead

- Lead technical initiatives on backend and infrastructure projects, actively contributing to sprint grooming, project planning, and guiding small teams to deliver high-quality solutions on time.
- Performed code reviews, candidate interviews, and designed technical evaluations and case studies, contributing to high standards in company recruitment.
- Facilitated team retrospectives to collect actionable feedback, driving continuous process and product quality improvements.
- Built and maintained scalable backend services using Node.js and NestJS, integrating PostgreSQL, GraphQL, Strapi, and AWS cloud technologies.
- Diagnosed and resolved performance bottlenecks by replacing ORM limitations with optimized raw SQL queries and database views, achieving up to a 3× improvement in response times.
- Designed and implemented comprehensive automated testing strategies, including unit tests with Vitest and end-to-end tests using Cypress and Playwright; authored internal guidelines to promote maintainability, parallelization, and reliability.
- Optimized Bitbucket CI/CD pipelines, reducing test and build execution times by over 50%, significantly shortening lead times from code submission to production deployment.
- Conceived and spearheaded development of a Docker Compose-based local environment, dramatically accelerating developer onboarding by enabling rapid, consistent setup of the full application stack.
- Contributed to frontend development using React, TypeScript, Redux Toolkit, and Next.js, ensuring seamless full-stack integration and superior user experience.

- Integrated DocuSign SDKs and webhook services to automate electronic signature workflows, increasing operational efficiency and platform usability.
- Developed an innovative routing algorithm to automate DocuSign envelope creation, streamlining manual processes and enhancing throughput.
- Prototyped a multi-language internationalization system leveraging Strapi and Next.js to extend platform accessibility globally.
- Established standardized Git workflows with clear branching and pull request strategies, improving team collaboration and minimizing integration conflicts.

**NDUR**, Boston, USA (Remote – Montevideo, Uruguay) Jan 2023 – Present  
 Senior Product Engineer **NDUR**, Boston, USA (Remote – Montevideo, Uruguay) Jan 2023 – Present  
 Senior Product Engineer

- Worked closely with founders and cross-functional stakeholders to define product vision, translate community needs into technical requirements, and prioritize features for a mobile platform supporting student-athletes across U.S. universities.
- Led the design and implementation of an AI-powered engagement bot embedded in topic-focused *Huddles*, proactively prompting discussion, summarizing conversations, and encouraging student participation to increase retention and community activity.
- Architected and implemented AI-driven chat summarization, classification, and labeling pipelines, enabling automatic generation of structured data from user-generated content for analytics, moderation, and product insights.
- Designed the end-to-end architecture for AI-generated reports, leveraging large language models to transform raw conversational data into actionable summaries used by internal teams for product and community analysis.
- Generated and maintained AI-derived labels and metadata to power analytics dashboards and reporting workflows, improving visibility into engagement patterns, topic trends, and user behavior.
- Developed a community-driven mobile application featuring real-time chat and posts/comments systems using Flutter, FlutterFlow, Firebase, and Swift, ensuring scalability and seamless user experience.
- Built usage analytics pipelines using BigQuery and Looker Studio, combining traditional event tracking with AI-generated signals to provide data-driven insights that inform product strategy.

**AroundU**, Washington DC, USA May 2021 – Aug 2021  
 Software Engineer

- Designed and developed an Android application facilitating student communication on university campuses, focusing on usability and scalability.
- Implemented accessibility features to ensure inclusive, user-friendly design for all users.
- Created and deployed an admin panel connecting promoters and students using React and AWS Amplify, improving operational workflows.

**OmnyLaunch (KittsCoaching App)**, Santa Clara, CA, USA Jan 2021 – May 2021  
 Lead Software Engineer

- Led development of a fitness coaching app that tracks workouts, nutrition, progress photos, and facilitates client-coach communication. Technologies used include Flutter and Firebase SDK.
- Built an administrative dashboard enabling coaches to manage programs, communicate with clients, and set goals using ReactJS and Firebase SDK.

**Northeastern University**, Boston, MA, USA Jan 2021 – May 2021  
 Teaching Assistant – Computer Systems, Dr. Ji-Yong Shin Jan 2021 – May 2021  
 Teaching Assistant – Information Retrieval, Dr. Ricardo Baeza-Yates Jan 2020 – May 2020

**Globant (Disney Studios)**, Córdoba, Argentina Mar 2018 – Jul 2019  
 Front-End Developer

- Maintained and scaled the ESPN.com website, collaborating with global teams.
- Designed a Google Sheets formula to automate presenter selection, reducing demo preparation time by 5 minutes per session.
- Created a CLI tool using Shell scripting to enforce commit message standards and streamline production deployments.
- Trained new hires on project architecture, development standards, and best practices.

**Freelance Project – Databoard (Oulton Hospital)**, Córdoba, Argentina  
Full-Stack Developer

May – Jul 2019

- Built a real-time dashboard for tracking patient studies using ReactJS, PostgreSQL, and Node.js/Express.
- Integrated the dashboard with the hospital's internal systems, enhancing operational efficiency and clinic profitability.

**InformeMedico.com.ar**, Córdoba, Argentina  
Full-Stack Developer

Mar 2017 – May 2021

- Developed and maintained diagnostic imaging and administrative systems (PACS, RIS, EHRs) used by healthcare facilities throughout Argentina.
- Automated server monitoring and maintenance tasks using Shell and Python scripting.
- Migrated sensitive patient data securely to cloud storage solutions including AWS S3.
- Created scripts to automate conversion of DICOM imaging files to video formats, optimizing for network constraints.
- Developed a Flutter app enabling physicians to attach audio recordings to patient studies.
- Enhanced server-side image rendering using C++ to reduce client-side processing overhead.
- Authored comprehensive technical documentation for systems and workflows.

## ACHIEVEMENTS & CERTIFICATIONS

**Two-time Fulbright Scholarship Recipient**, awarded for academic excellence and demonstrated leadership.

**Universidad Nacional de Córdoba**, Córdoba, Argentina

Apr 2023 – Dec 2023

*Diploma in Data Science, Artificial Intelligence, and Their Applications in Economics and Business*

Advanced coursework focused on applying AI and data science methodologies to real-world economic and business challenges.

**Apache Spark with Scala – Hands-On with Big Data**  
Udemy

Jun 2021

**University of Massachusetts – Amherst**, Amherst, MA, USA

Jan 2018 – Mar 2018

*Machine Learning (Friends of Fulbright Program)*

Selected for a competitive Fulbright program to study machine learning and data science as part of an academic exchange initiative.

## SKILLS

**Programming Languages:** Scala, Python, C#, Java, Pascal, JavaScript, C, C++.

**Operating Systems:** macOS, Windows 10, GNU/Linux (Debian / CentOS).

**Big Data/Analytics:** Apache Spark, Hadoop MapReduce, Solr, BigQuery, Looker Studio.

**Backend Development:** Node.js, NestJS, Next.js, Strapi, KeystoneJS, Express, .NET Core, BrookFramework.

**Frontend Development:** ReactJS, Next.js, Redux Toolkit, Vanilla JS, Bootstrap, Material UI.

**Mobile Development:** Flutter, Swift.

**Cloud & DevOps:** AWS (EMR, S3, Lambda), Firebase, DocuSign, Docker, Docker Compose, Bitbucket CI/CD pipelines.

**Databases:** PostgreSQL, MySQL, MongoDB.

**Testing & Automation:** Vitest, Cypress, Playwright, Shell scripting, Python automation.

**Leadership & Team Management:** Technical lead experience, agile planning, hiring and mentoring, retrospectives.