## Juan Agustin Gregorieu

## Boston, MA 02135 (406) 561-5300

agustin.gregorieu@gmail.com https://agustingrigoriu.github.io/resume/

#### **EDUCATION**

## Northeastern University, Boston, MA, USA

September 2019 - May 2021

Khoury College of Computer Sciences Master of Science in Computer Science

GPA: 4.00

Relevant Courses: Large-Scale Parallel Data Processing, Information Retrieval, Algorithms, Machine Learning, Software Security Vulnerabilities, Computer Systems, Artificial Intelligence, and Programming Design Paradigm.

### Projects:

- Truco AI: Created a set of AI agents capable of playing a popular card game called "Truco". Used Python to develop a MiniMax (with Alpha-Beta Pruning) agent, and a Q-Learning agent.
- Distributed K-Means: Designed and Developed a distributed version of K-Means using Scala and Spark. The goal was to find interesting patterns in a dataset full of tweets of American politicians.
- Hacker News Search Engine: Improved the way relevant results where retrieved by the Hacker News search engine. Used Solr to generate the index from a dataset full of HN posts.

#### Awards: Fulbright Scholarship.

**Universidad Tecnologica Nacional**, Cordoba, Argentina Mar 2013 - Dec 2017 Bachelor of Engineering in Information Systems Engineering GPA: 4.00

Relevant Courses: Algorithms and Data Structures, Systems Analysis and Design, Software Engineering, Web Development, Artificial Intelligence.

#### Projects: **PriHood**

• Developed a hybrid mobile app capable of automating several processes of life in private neighborhoods. Used: Ionic, Angular, C# (.Net Core), and MySQL.

#### **EXPERIENCE**

Northeastern University, Boston, MA, USA Teacher Assistant for Computer Systems

Jan 2021 - May 2021

Northeastern University, San Jose, CA, USA Teacher Assistant for Information Retrieval Jan 2020 - May 2020

- Proctoring exams, grading tests and assignments, and attending lectures.
- Responsible for performing teaching or teaching-related duties to assist faculty members, professors, department heads, and other faculty.
- Tutor and mentor students. Schedule and maintain regular office hours to meet with students.

Front-End Developer

- Collaborated with teams located in different parts of the world for maintaining, expanding, and scaling the new espn.com website by using standard REACTJS and unit testing practices.
- Designed a formula using Google Spreadsheets to recommend the next three DEMO presenters, which reduced the time of the pre-demo sessions by 5 minutes.
- Implemented a command-line tool using Shell Scripts that would abstract the developers from the task of following standard commit messages format, reducing the time a new feature or fix had to wait until being included in production.
- Trained incoming employees on the project's structure and best practices.

## Freelance Project - Databoard (Oulton Hospital), Córdoba, Argentina May - July 2019

Full-Stack Developer

- Developed a board that allows secretaries to follow the patients' studies process in real-time by using ReactJs, PostgreSQL, and NodeJs/Express, which increased the efficiency of the mentioned process and therefore increased the clinics' profits.
- Integrated the hospital database with the web application's database.
- Cooperated with the hospital's systems department to implement the web application on the intranet.

## **InformeMedico.com.ar**, Córdoba, Argentina Mar 2017 - July 2019 Full-Stack Developer

- Developed and implemented efficient diagnostic imaging and administrative systems across health care providers around Argentina. Mostly PACS and RIS systems, electronic health records systems, resources monitoring systems, and resource scheduling systems. Used Python, Pascal, Javascript, HTML, CSS, and PostgreSQL.
- Initiated and developed inner tools to keep track of potential problems in our client's servers using Shell script and Python.
- Collaborated with the secure migration of patients' data from local storage to services on the cloud such as S3 using Python and PostgreSQL.
- Created automation scripts to process large volumes of data across the clinics' databases. One of these script's goals was to generate videos from DICOM files that adapted their resolution to the client's network bandwidth.
- Designed and developed a mobile application to allow physicians to attach recordings to patients' studies by using Flutter (Dart), Python, and PostgreSQL.
- Contributed to the development of a highly efficient server-side rendering tool to display and process images from a patient's studies and avoid overloading the browser using C++ to ensure high efficiency.
- Wrote and maintained technical documentation to describe program development, logic, coding, testing, changes, and corrections.

# TECHNICAL KNOWLEDGE

Programming Languages: Scala, Python, C#, Java, Pascal, JavaScript, C, C++. Operating Systems: MacOS, Windows 10, GNU/Linux (Debian / CentOS).

Big Data/Information Retrieval Technologies Solr, Apache Spark, Hadoop MapReduce.

 $\boldsymbol{Web}$   $\boldsymbol{Backend}$   $\boldsymbol{Technologies:}$  NodeJS, Express, Apache, .NET CORE, Brook-Framework.

Web Frontend Technologies: ReactJS, Vanilla JS, Bootstrap.

Mobile Technologies: Flutter. Cloud Providers: AWS, Firebase.

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

 ${\bf \it Databases} \ {\tt PostgreSQL}, \ {\tt MySQL}, \ {\tt MongoDB}.$