

Joao Victor Quintanilha

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SOFTWARE ENGINEER INTERN

Master's student with a strong foundation in web engineering and data science, aiming for a software development career. Passionate about teaching programming, he's skilled in building user-responsive, data-driven applications, with a diversified background that drives his ambition to be a well-rounded software engineer.

Education

Tufts University, Medford, MA Expected May 2026
M.S. in Data Analytics, concentration: Software Engineering GPA: 3.71
B.S. in Computer Science and Biology May 2024

- **Relevant Coursework:** Algorithms, Big Data, Data Structures, Machine Learning, Software Engineering, Statistics
- **Awards:** BRASA Scholar (National), Palantir Technologies Scholar (National), Pegasystems Scholar (Global)

Software Engineering and Programming Experience

BRASA Hacks, Columbia University, NY Aug 2024

Full-Stack Developer, Blockchain Securitization Platform, [view project](#)

- Designed and developed a securitization platform for Bank BTG Pactual using TypeScript, React, Prisma ORM and MongoDB
- Engineered Ethereum tokens by designing smart contracts based on deterministic functions to respond to the environment
- Implemented a secure user authentication system utilizing Gmail OAuth 2.0 for seamless login

Tufts Department of Urban & Environmental Policy & Planning, Medford, MA May 2024 - Jul 2024

Programmer, Water Consumption in Agent-Based Modeling

- Built the first version of an agent-based model for water consumption in Pakistan using the MESA library in Python
- Reviewed 30,000+ data points on industrial water usage alongside government reports to initialize agents of the model
- Developed a text classification algorithm that categorized 67% of the data, speeding up the production of charts and analyses

Tufts Human Factor & Ergonomics Society (THFES), Medford, MA Jul 2023 - Jul 2024

Web Developer, [view project](#)

- Worked under an Agile development methodology, creating a Notion dashboard to integrate and manage all team tasks
- Streamlined maintenance interface by implementing a content management system, allowing owners to update content
- Rebuilt the entire website (36 pages) using JavaScript and HTML/CSS, improving member engagement by 25%

Other Technical Experience

Tufts University, Medford, MA Jan 2024 - present

Teaching Assistant, Web Programming – Department of Computer Science

- Mentor over 160 students on SQL and JavaScript projects, with a focus on constructing consistent web applications
- Teach recitations on topics including REST APIs, web protocols, software development life cycle, and database management

FIRST Robotics, Goiania, Brazil May 2023 - present

Programming Mentor, SESI Vila Canaa School

- Mentor 10 teenagers for the FIRST Robotics Competition, instructing on principles of object-oriented programming in Java
- Mentored 15 kids for the FIRST LEGO League (FLL) competition, teaching mechanical principles and introductory programming using LEGO EV3 toolkits, leading them to earn 1st place in Robot Design at the National FLL tournament

Cambridge Health Alliance, Cambridge, MA Aug 2020 - May 2021

Information Technology Staff, Department of Public Health

- Developed the Somerville Determination of Need Project website using Google Sites, configuring front-end layouts and ensuring seamless user interaction for project stakeholders; the project distributed 500K of state aid to the Boston area
- Administered and updated the WordPress of the food pantry, maintaining network functionality

Skills

Programming: Python, C/C++, Java, JavaScript, Bash, PHP

Databases: MySQL, MongoDB, Hadoop

Web Development: Node.js, React, HTML/CSS

Cloud and DevOps: Google Cloud Platform, Agile, Git, Jira

Data Science & ML: TensorFlow, Pandas, Jupyter, PowerBI

Certifications: Technical Course in Graphic Design,

Intro to AI-driven Science on Supercomputers Support

Languages: English, Portuguese, Spanish