

Thomas Vicente

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EXPERIENCE

AI4COMMSCI | ML/AI RESEARCH SCIENTIST

Jan 2023 – Current | Boston, MA

- Achieved enhanced NLP capabilities by developing and implementing a robust large language model pipeline, leveraging FastText and Transformer models.
- Improved linguistic analysis efficiency and accuracy, enabling cutting-edge insights showcased in domestic and international conference presentations.
- Reduced processing time by 25% through the strategic application of pre-trained embeddings with PyTorch and sci-kit learn.
- Trained CNN models to study visual perception of language and language learning performance.
- Enhanced project workflows by conducting advanced data pre-processing and exploratory analysis, directly shaping feature engineering for language modeling and speech recognition initiatives.

BAIN CAPITAL | SOFTWARE DEVELOPMENT INTERN

Jan 2021 – Jul 2021 | Boston, MA

- Delivered high-quality web solutions by collaborating with senior engineers.
- Implemented best practices in scalable JavaScript development, enhancing code reliability and maintainability.
- Designed and built software solutions using React, Python, and GitHub.

PROJECTS

EAGLEVISION | UNIVERSITY COURSE REGISTRATION ASSISTANT

Sep 2023 – Mar 2024 | Boston, MA

- Delivered a Django-based wait list application that streamlined course registration for students.
- Collaborated with a team of five and Boston College faculty and staff, ensuring alignment with user requirements and institutional goals.
- Developed features using Python, Django, Flask, and PostgreSQL, enhancing app functionality and database reliability.

NFL MATCHUP MODEL | PREDICTS PLAYER PERFORMANCE

Apr 2024 | Boston, MA

- Developed a Deep Learning model, trained on box office statistics to predict individual player performance in
- Predicted confidence intervals of total yards, rushing yards, reception yards, yard after catch, and more based on desired player snap percentage.
- Developed features using Python, PyTorch, Flask, and PostgreSQL, and Matplotlib enhancing app functionality and database reliability.

TWITTER API BACKEND | TWITTER BACKEND CLONE

May 2023 | Boston, MA

- Implemented a twitter back-end clone using spring boot allowing full functionality of user, tweet and hashtag management.
- Ensured Security and facilitated data transfer by implementing the onion architecture.

EDUCATION

BOSTON COLLEGE

BACHELOR IN COMPUTER SCIENCE

WITH MINOR IN PHILOSOPHY

May 2024 | Chestnut Hill, MA

Dean's List (4 Semesters)

Cum. GPA: 3.55 / 4.0

SKILLS

PROGRAMMING

3+ years:

Python • Java

1+ years:

R • JavaScript • LaTeX

TECHNOLOGY

Git/Github • Spring Boot • Linux

UNIX • Windows • NLP

Artificial Intelligence • Angular

COURSEWORK

GRADUATE

Computational Models of Cognition

Computational Complexity of

Algorithmic Puzzles and Games

UNDERGRADUATE

Discrete Mathematics

(Teaching Assistant)

Machine Learning

Software Engineering

Calculus I-IV

Data Visualization

Introduction to Probability

LANGUAGES

English (Native)

Portuguese (Fluent)

Spanish (Fluent)

German (B2)

Italian (Conversational)

RESEARCH INTERESTS

Natural Language Processing

Machine Learning

Computational Complexity Theory

Theoretical Computing

Quantum Computing