Gwendal Beaumont

Ph.D. Student in Software Engineering



Education

2023-Present Ph.D. - Software Engineering, IMT Atlantique & IMT Mines Alès, Brest, FR

Title of the thesis: TwinDevOps, an automated process for the deployment and dynamic evolution of Digital Twins.

2020–2023 Engineer's Degree - General Engineering, IMT Mines Alès, Alès, FR

One and a half year of general training followed by one and a half year in the Software Engineering and Artificial Intelligence Department.

2018–2020 Classe préparatoire aux grandes écoles, Lycée Malherbe, Caen, FR

Two-year intensive training to prepare for the French engineering schools competitive exam. Main courses: Mathematics, Physics, Computer Sciences.

Experience

Vocational

2023–2023 Intern, ALTEN, Rennes, FR

Research internship on the labelling process of data in order to be used with Machine Learning algorithms. Detailed achievements:

- O Creation of a framework to manage unlabelled data and get statistics from the data
- Creation of an application
 - Front-end in TypeScript with the Electron framework;
 - Back-end reusing the framework we created in Java woth the Spring Boot framework;

2022–2022 Visiting International Scholar, Miami University, Oxford, OH, USA

Internship as an assistant in the preparation of a master thesis on the effect of errors in agent-based simulation systems.

Detailed achievements:

- O State of the art on the topic of errors representation in computer simulation
- O Creation of a simulation framework in Python to take errors into account
- Creation of multiple agent-based simulaitons in Python to test our framework

Leadership & Activities

2023-Present Ph.D. students representative at the board of directors, Institut Mines-Télécom, FR

IMT Ph.D. students representative at the national level for two years. I take part in the board of directors and a work group focused on respect and equality.

- O Creation of a national Ph.D. students network
- O Creation of national events for Ph.D. students

2021–2022 Communication Manager, IMT Mines Alès student council, Alès, FR

Member of the communication managers team for the student council druing a year.

- Administration of a website
- Management of social networks
- O Answering and moderatins emails and comments on social networks

Languages

French Native English Fluent (TOEIC: 975/990)

Spanish Intermediate Korean Basics

Computer skills

Coding C/C++, Dart, Java, JavaScript/TypeScript, Python

Infra Linux, Docker, Network, SQL

Interests

Motorsports Formula 1, motorbikes

Music

Sports Badminton, rock climbing and running

References

- [1] J. T. Beerman, G. G. Beaumont, and P. J. Giabbanelli. On the necessity of human decision-making errors to explain vaccination rates for covid-19: an agent-based modeling study. In *2023 Annual Modeling and Simulation Conference (ANNSIM)*, pages 413–424, Los Alamitos, CA, USA, 5 2023. IEEE Computer Society.
- [2] Jack T. Beerman, Gwendal G. Beaumont, and Philippe J. Giabbanelli. A scoping review of three dimensions for long-term covid-19 vaccination models: Hybrid immunity, individual drivers of vaccinal choice, and human errors. *Vaccines*, 10(10), 2022.
- [3] Jack T. Beerman, Gwendal G. Beaumont, and Philippe J. Giabbanelli. A framework for the comparison of errors in agent-based models using machine learning. *Journal of Computational Science*, 72:102119, 2023.