Louis Labesse

46 Rue de Romilly, Le Mesnil Le Roi, France | louislspz@gmail.com | +33 789760416 | linkedin.com/in/louis-labesse louislabesse.com

Education

ENSAM - Engineering school of "Arts et Métiers" - Metz/Paris, France:,

Sept 2024 - July 2027

• Combined BSc + MSc in Mechanical and Industrial Engineering, a competitive 3-year program

Lycée Voltaire - Preparatory Class - Paris, France:

Sept 2021 - July 2024

• A three-year intensive program for admission to top-ranked engineering schools.

Lycée International - Saint-Germain-en-Laye, France:

Sept 2018 - July 2021

• French Scientific Baccalaureate – International Option (OIB) - Bilingual Curriculum in Spanish schools.

Experience

Member of ENSAM electronics club, Metz, France

September 2024 - Today

- Managed inventory and funds for 3D printers.
- Repair and maintain overused or broken electronic devices of the school
- Repaired one computer, soldered 4 lighting systems for the school and printed 6 pieces asked by student for personal use Thanks to my work, the 3D printers remained operational and well-managed, allowing students to use them efficiently. My 3D printing contributions helped students complete their personal projects.

Member of ENSAM open access blacksmithing club, Metz, France

September 2024 - Today

- Handcrafted 50cm x 40cm steel windows guards
- Assisted to +15 sessions, introducing newcomers to blacksmithing techniques.
- Supervised safety measures and ensured all participants wore appropriate protective gear.

Thanks to my active involvement, I helped foster a safe and collaborative team environment where newcomers felt supported and engaged.

Permanent Contract at Super U, Le Mesnil Le Roi, Yvelines, France

August 2024

- Managed inventory with product pallets weighing up to 2 tons.
- Organized 3 shelves per day, maintained stock levels and managed expired products and promotions.

Thanks to my efforts, inventory was efficiently managed, ensuring product availability while understaffed, improving customer satisfaction. My organization of shelves and stock maintenance helped keep the store well-arranged and optimized sales through summer promotions.

Seasonal Job at Hotel Vernet (5-Star), Champs-Élysées, Paris, France

August 2023

- Worked as a waiter, room attendant, and barman in a luxury hospitality setting.
- Managed 110+ guests per shift in the dining area and serviced 50+ rooms daily.

I ensured high-quality service and guaranteed translations in 4 languages in a very stressful and demanding environment. My versatility in different roles contributed to seamless operations during a challenging time of the year, teaching me the constant pursuit of perfection, where not even a single glass spill is tolerated.

Class Representative

September 2021 - June 2024

- Represented a class of 28 to 40 students, liaising between students and faculty.
- Managed the financing, ordering, and distribution of approximately 510 school sweatshirts over three years.
- Oversaw an annual budget of €1,600, requiring strong planning and financial management.

Supported fellow students through three intensive years of study, fostering a positive learning environment. Acted as a key liaison between students and teachers, ensuring clear communication. Strengthened class cohesion by organizing initiatives like sweatshirt distribution.

Volunteer at Les Amis de Remagen, Maisons Laffitte, France

September 2018 - September

2021

- Assisted in 40+ German language lessons with 7–14 participants per session.
- Participated in 5 cultural exchange events, fostering Franco-German relations.

This experience strengthened my communication and teaching skills by assisting in German language lessons. Participating in cultural exchange events deepened my understanding of Franco-German relations and improved my adaptability in international settings. It also enhanced my ability to engage with diverse groups, fostering teamwork and cross-cultural connections.

Internship at Librairie de la Maison de la Presse, Maisons Laffitte, France

January 2018

- Organized over 1,000 books and managed 3 weekly deliveries to optimize customer experience.
- Assisted an average of 60 customers daily, strengthening communication skills.

I organized a large inventory of books and managed regular deliveries, ensuring a smooth customer experience. I enhanced my communication skills and gained a deeper understanding of customer satisfaction and retail operations during during a peak period of high customer traffic after Christmas.

Internship at TechKidsAcademy, Saint Germain-en-Laye, France

Summer 2017

- Contributed to the creation of 2 fully functional platform video games over a 4-week period, incorporating user input, physics simulation, and basic graphics.
- Spent approximately 8 hours debugging, enhancing problem-solving skills.

Long debugging sessions strengthened my problem-solving skills, fueled my passion for technology, and sparked my drive toward a career in innovation.

Summer Camp Young Panda WWF, Baden-Württemberg, Germany

Summer 2017

- Took part in environmental actions such as forest clean-ups and biodiversity workshops with other international volunteers.
- Together, we also built small habitats to protect local wildlife and learned about sustainable forest management. This experience deepened my commitment to environmental protection and strengthened my teamwork and intercultural communication skills.

Projects

Python Simulation of a automated warehouse, Metz. France

February 2025 - June 2025

- Simulated a fully automated warehouse environment using object oriented programming including robots, conveyors and storage zones.
- Developed an adaptive A* algorithm to enable real-time pathfinding and collision avoidance in a constantly changing setting.
- Used Tkinter to create a graphical user interface for visualization and XML for data configuration and storage.

Management and Optimization of tool inventory on a production line, Metz, France

September 2024 - June 2025

- Managed an inventory of approximately 45 tools (e.g., drills, scanners, screwdrivers, tablets...) used in a 42 m² production line.
- Optimized storage layout based on frequency of usage and location on the production line.
- Designed 3D models of each 45 tool with 3D scanners.
- Cut 9 custom foam inserts with imprints of 3D-modeled tools

Engineering Project, Study of Playgrounds Producing Energy

September 2023 - June 2024

- Designed and built a life-size slide prototype (3m slope) to simulate electricity production.
- Used 3D modeling software to design and 3D print 12 prototype components.
- Implemented a 12V-DC motor as a generator and conducted 25+ tests involving computer science, electronics, and energy science.

Engineering Project at Seine Aval Wastewater Treatment Plant, Yvelines, France

September 2021 - June 2023

- Designed and analyzed automatic bar screens, including size (1 m wide, 2 m high) and hydraulic / electrical parameters (1.4 m3 / s per bar screen powered by DC motors).
- Contacted engineers at the wastewater treatment plant for technical insights.

Skills

- Languages: French: Native speaker, Spanish: Bilingual + DELE + IOB, English: Advanced + Cambridge First, German: Advanced + SchprachDiplom
- Programming Languages: Python, MySQL, LateX, Arduino
- Engeneering Softwares: Matlab, Yakindu, ABAQUS, CATIA-V5, Solidworks, Fusion360, Regressi

Interests

- Sports: Climbing, Running, Rugby, Badminton
- Meditation
- 3D software: 3D modeling, simulations and 3D printing
- Hardware PC maintenance, Electronics fixing and component troubleshooting