

ALEXEY OMELCHUK

Personal details

 alexeyeuk@gmail.com

 Valencia

Languages

- Español: Native
- Catalan : Native
- Inglés: B2 Level - Cambridge
- Ucraniano: Native

Professional Profile

I am a 5th year double degree student in **Computer Engineering** and **Business Administration** at the **Polytechnic University of Valencia (UPV)**. My academic background combines **strong software engineering foundations** with analytical, **economic, and strategic thinking**, enabling me to approach complex technical problems from both an engineering and systems-level perspective.

My main academic and professional interests focus on **applied artificial intelligence, automation**, and data-driven systems. I am particularly interested in **designing and integrating AI-driven solutions**, including generative AI, intelligent agents, and automated pipelines into **real-world applications** and organizational processes, with an **emphasis on scalability, maintainability, and decision support**.

Additionally, I have experience in **ethical hacking** and **secure software design**, which strengthens my ability to develop robust and reliable AI-driven systems.

Education

- DOUBLE DEGREE IN COMPUTER ENGINEERING AND BUSINESS ADMINISTRATION:

- **POLYTECHNIC UNIVERSITY OF VALENCIA (UPV) – VALENCIA, SPAIN** **2022 – 2027**
- Developed a strong foundation in **software engineering, systems analysis, and business management, combining technical and strategic perspectives**.
- Participated in academic projects that **integrate technological solutions with business processes**, including automation and AI-focused initiatives.

Experience and Projects

- **Freelancer Projects:** Worked as a **freelancer** for various companies in Spain, developing **AI-based solutions to automate processes, optimize workflows, and solve real-world business challenges**. Highlight: Developed an AI-powered automation workflow integrating multiple APIs to optimize business processes.
- **GitHub Projects:** Collection of academic and **personal projects focused on software engineering, web development, automation**, and AI-driven systems, including **full-stack applications, automation workflows**, and applied AI prototypes. (Link: [GitHub](#))
- **Programming Competitions:** Participation in **programming competitions at UPV**, which has strengthened my ability to **solve problems efficiently, work in a team, and perform under pressure**.
- **Completed Certifications:** Completed certifications in relevant technologies and methodologies; details available on my [LinkedIn](#) profile and [personal website](#).

Technical Skills

• LANGUAGES AND FRAMEWORKS:

I have solid experience in **software development and automation**, with proficiency in **Java, JavaScript, Python, Bash (Shell Scripting), Linux, PHP, MySQL, Git**, and container-based technologies such as **Docker**. I am particularly interested in applied artificial intelligence, **workflow automation**, and data-driven systems, focusing on designing scalable, maintainable, and AI-driven solutions. My work also incorporates frameworks such as **Laravel, React, Vue, and Next.js**, enabling the development of robust **full-stack applications** and automated pipelines.

• CYBERSECURITY AND ETHICAL HACKING:

I have an **upper-intermediate level** in **ethical hacking** and secure software design, with hands-on experience identifying and mitigating common vulnerabilities from the **OWASP Top 10**, including SQL Injection (SQLi), Cross-Site Scripting (XSS), XML External Entity (XXE), Local/Remote File Inclusion (LFI/RFI), Log Poisoning, among others. **I am also ECCPTv3 certified (INE Security), a professional credential in offensive cybersecurity, which reinforces my ability to build robust, secure, and AI-driven systems.**

• ARTIFICIAL INTELLIGENCE AND ADVANCED AUTOMATION:

I have experience designing and implementing AI-driven automation workflows using tools such as n8n and Python, integrating **multiple APIs, databases**, and external services. I have worked as a freelancer for various companies, developing AI-based solutions to automate processes, optimize workflows, and solve real-world business challenges. My main interests include generative AI, intelligent agents, and the practical application of machine learning models, with a focus on building scalable, maintainable, and data-driven solutions.

Soft skills

- **Adaptability and Fast Learning:** Quickly assimilate new tools and concepts in **both technological and management contexts**, thriving in **dynamic environments**.
- **Proactivity and Commitment:** Take initiative while collaborating effectively, consistently **seeking to acquire new knowledge and improve with each opportunity**.
- **Continuous Learning:** My commitment to continuous learning has allowed me to develop new skills both academically and through **self-taught learning**. This multidisciplinary approach and my constant desire to learn have equipped me with the ability to face challenges in the **technological and business fields, which enables me to contribute significantly to projects that require a broad and strategic perspective**.

Business Administration & Strategy

I am currently in my fourth year of Business Administration and Management, gaining practical foundations in **management, accounting, marketing, and strategy**. Although I have not yet focused extensively on these areas, it is worth highlighting that these studies complement my IT background by providing a broader understanding of how technological solutions can be effectively integrated into business processes, preparing me to work in multidisciplinary teams and contribute to strategic decision-making.

For more information:

- <https://cv-alexey.calexia.es/> (Website made with Next.js)
- <https://www.linkedin.com/in/alexey-omelchuk/>
- <https://github.com/alexey-omelchuk>