

Mapping the AI Revolution: Insights for STEM Careers in the EU

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Elevator Pitch

- ▶ What our project visualizes?
- ▶ The best choices to make for your career.
- ▶ Why is the project interesting?
- ▶ It helps student choosing what skills to get and where to immigrate

Motivation

- ▶ Age of AI
- ▶ Hard to know what to do and what to learn
- ▶ Our tools are for STEM graduates for want to know how to adapt to this new economic age

The Data

- ▶ CEDEFOP: European Center for the Development of Vocational Training
- ▶ CEDEFOP Skills Forecast: Excel Database forecast 2025 to 2035
- ▶ Forecast of retirement, skill leve, sectors evolution, stem job replacement and creation ect... for each EU country
- ▶ <https://www.cedefop.europa.eu/en/tools/skills-forecast>
- ▶ Stack overflow survey data: annual dev stack overflow job and skill survey
- ▶ <https://survey.stackoverflow.co/>

Research Question

- ▶ How can STEM students in the EU strategically adapt their skills and career planning to remain competitive in an AI- and automation-driven job market in the next years?
- ▶ Micro Level: What skills to learn? What language or tools to use in the future?
- ▶ Macro level: which EU economy is the best for STEM student career? Which sector in the most sought country have the best prospects?
- ▶ Motivation: help student make the best choice for their personal career.

Feature description and design

- ▶ Stack overflow :
 - ▶ Circular Packing Chart: Highlights industries, job roles, and the tools used by professionals in each industry.
 - ▶ Chord Diagram: Displays the relationships and preferences between AI-powered tools and developer categories.
- ▶ CEDEFOP:
 - ▶ Choropleth map: Displays the amount of STEM jobs that are forecasted to be created by the CEDEFOP European Agency from 2025 to 2035
 - ▶ Bar chart of normalized job creation per country and per sector for countries

Limitation

- ▶ A lot of data to show
- ▶ Might be confusing

Contributions

- ▶ Md Kamrum Islam: Stack overflow survey visualization
- ▶ Sebastien Gomez: CEDEFOP forecast visualization

Q&A