AI Policymakers: Lawyers are a majority in the EU and USA, Tech Professionals Prevail in China and russia

In May 2023 we prepared a map of AI stakeholders and policymakers, where we created a diverse ecosystem of stakeholders shaping AI governance, empowering responsible and inclusive AI innovation.

Now we decided to move further and our analysts investigated the education and work background of policymakers of key countries, as it's obvious that their **experience affects the priorities and approaches to the regulation and development of AI in these countries**.

We analyzed the breakdown of education and work experience of key people in regulatory bodies that deal with the regulation and policymaking of AI in the USA, United Kingdom, China, the EU and russia, distinguishing between technical (computer science and other technical education) and non-technical degrees, as well as the existence of work experience in the industry (AI, programming, academic experience).

Detailed results can be found in the appendix (URL).

In this article we want to share some key insights:

1. The majority of policymakers in China and russia have higher technical education (61.1% in China and 54.5% in russia), as well as the largest proportion of those who worked in this field;
2. The European Union and the USA have the largest number of lawyers (40.7% in the EU and 29.5% in the USA) in regulatory bodies and the smallest number of people with an engineering or engineering-technical education and background;
3. In the USA, surprisingly, the key bodies for the regulation and development of AI policies are quite well balanced in terms of work experience and education (37.7% of government officials in the USA have engineering work experience and 37.7% have total tech education)
4. As we can see, the historical balance of technical/humanitarian experts depends on where the AI regulation initiative originated historically. If in the parliament, as a rule, most of the professionals from bodies and councils still have a legal or another humanitarian background. If in the government, then the number of participants with engineering and tech experts with practical work experience is much larger

Considering the situation with the effectiveness of AI regulation (and overregulation), we recommend increasing the number of experts with practical experience in AI and engineering education, since it's **impossible** to regulate technologies without understanding what these technologies can or cannot do and how they can or cannot affect human rights, public relations, etc.

However, countries with more authoritarian systems (China and russia) clearly gravitate towards the model when the overwhelming majority in the field of AI policymaking has a technical background.

Therefore, against the background of other key countries, the USA probably achieved a fairly effective balance and diversity of backgrounds.

The WiseRegulation.org team.

Appendix

Research: Educational and professional background of AI policymakers in the USA, UK, China, EU and russia

Legend	Code	%					
			USA	UK	China	EU	russia
Higher education (bachelor)							
Computer science	1		32.8	16.1	33.3	1.4	45.4
Other tech degree	2		4.9	1.6	27.8	10.1	9.1
Law	3		29.5	11.3	5.5	40.7	18.2
Economics	4		9.8	21	0	11.6	9.1
Other non-tech education degree (international business etc)	5		19.7	43.5	5.6	33.3	18.2
N/A	6		3.3	6.5	27.8	2.9	0
Total tech (1,2)			37.7	17.7	61.1	11.5	54.5
Total non tech (3,4,5,6)			62.3	82.3	38.9	88.5	45.5
Work experience (past or now)							
Software engineer	1		14.7	6.3	11.1	1.5	18.2
AI software engineer	2		19.7	14.3	22.2	0	27.3
Engineering background (non computer science related job)	3		3.3	1.6	27.8	4.3	9.1
Other	4		62.3	77.8	38.9	94.2	45.4
Engineer experience (1,2,3)			37.7	22.2	61.1	5.8	54.6
No experience (4)			62.3	77.8	38.9	94.2	45.4
Working as an AI Engineer (NOW)							
Yes	1		14.8	33.3	22.2	0	18.2
No	2		85.2	66.7	50	100	81.8
N/A	3		0	0	27.8	0	0
Working now (1)			14.8	33.3	22.2	0	18.2
Not working (2,3)			85.2	66.7	77.8	100	81.8

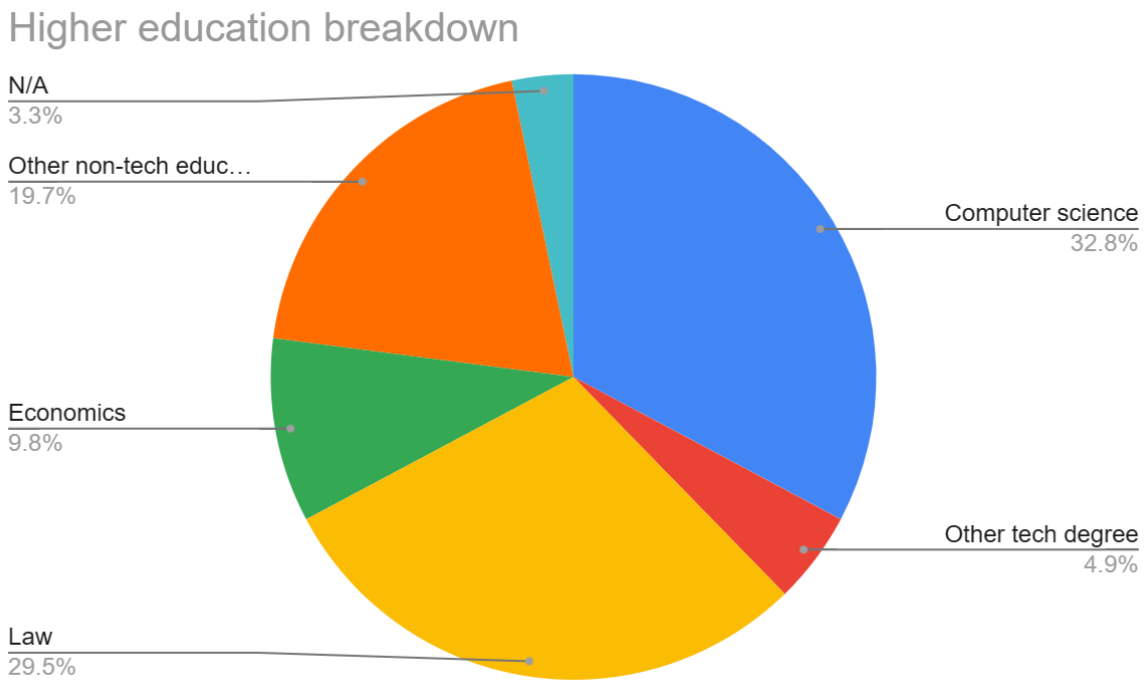
Methodology

This part explains various methodologies that were used in gathering and analysis which are relevant to the research. This secondary research was carried out online in the USA, UK, China, EU and russia. The rationale behind this choice is the sense that information about government bodies and key policymakers in these countries is available freely online. The researcher used a quantitative approach in analysing the data collected, while some conclusions were reached after doing simple mathematical computations such as mean, percentages and tabulations.

USA

Education

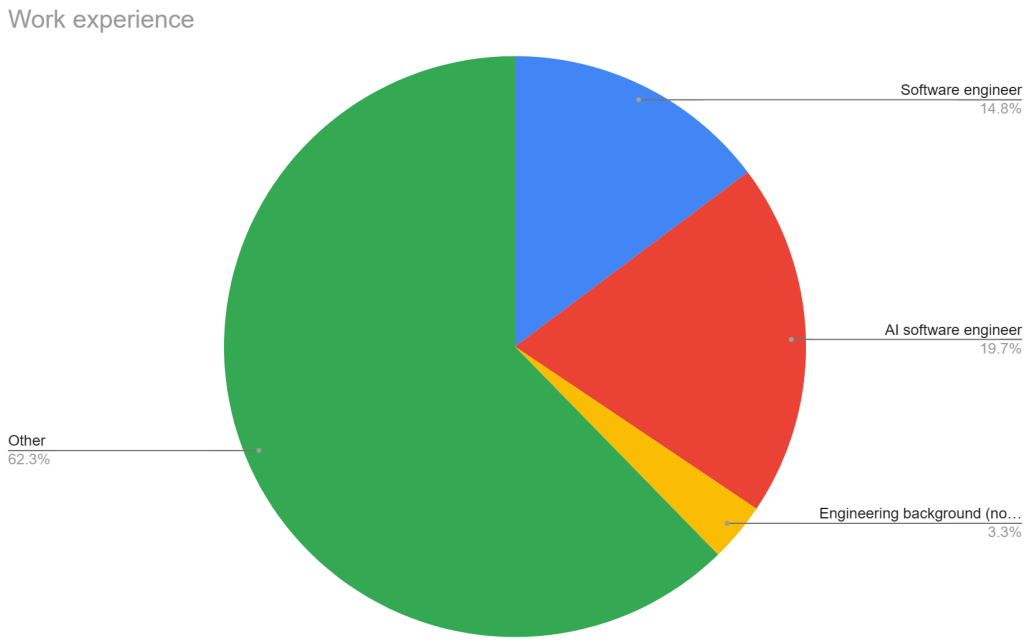
According to our analysis, 62 key AI experts work in four US government bodies that deal with AI regulation and policy, including Subcommittee on Privacy, Technology, and the Law, National Security Commission on Artificial Intelligence, National Artificial Intelligence Advisory Committee (NAIAC) and National Artificial Intelligence Initiative Office (NAIIO).



This pie chart visually represents the distribution of higher education degrees among the US AI experts, indicating that the highest proportion (32.8%) have a degree in Computer Science, followed by Law (29.5%) and Other Non-Tech Degrees (19.7%), and Economics (9.8%).

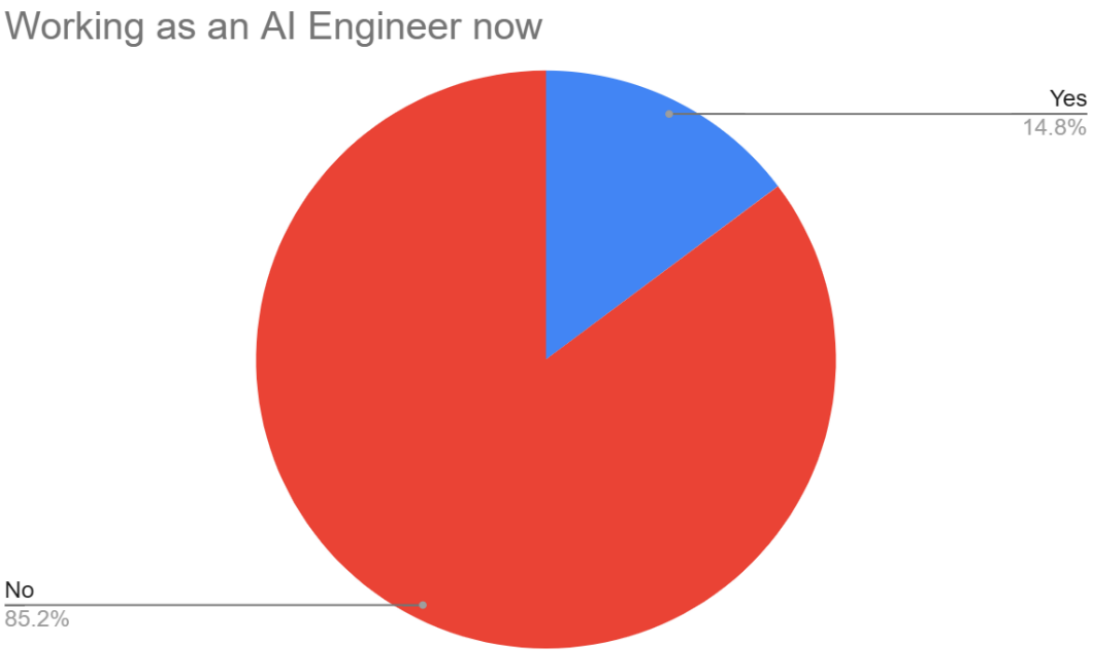
Work experience

As for work experience, most government officials in the field of AI 62.3% have work experience in other fields, followed by AI software engineers (19.7%) and software engineers (14.8%) background.



Working as an AI engineer now

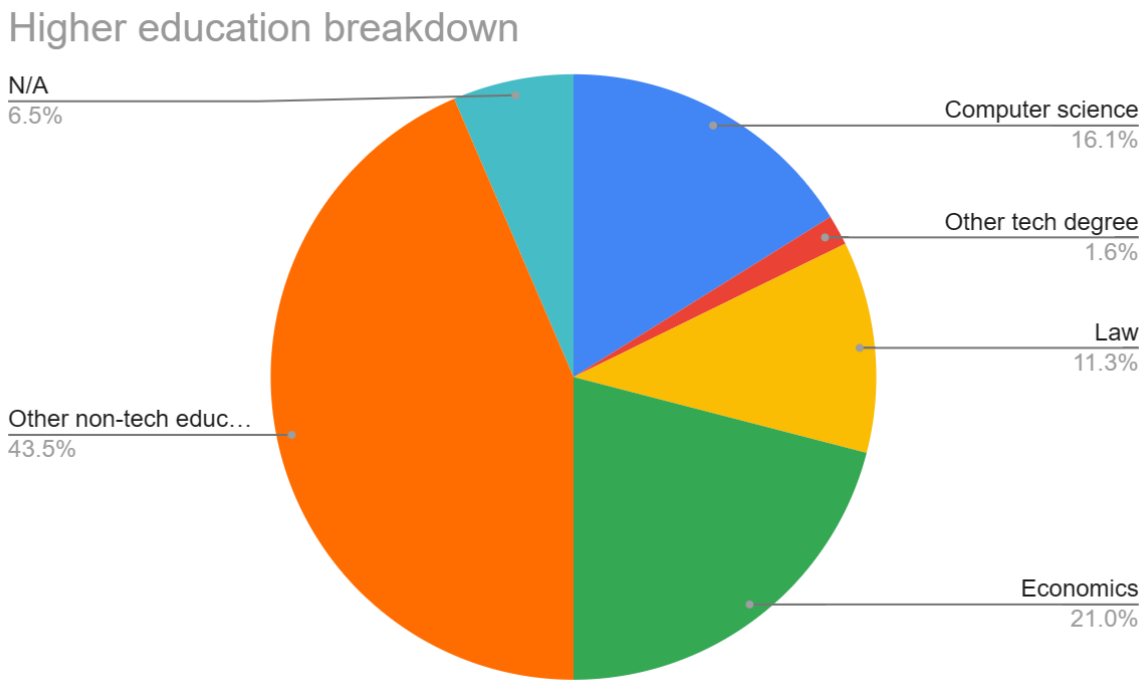
Only 14.8% of professionals involved in AI regulation and policy in the USA are working as AI engineers now, while 85.2% occupy other positions.



UK

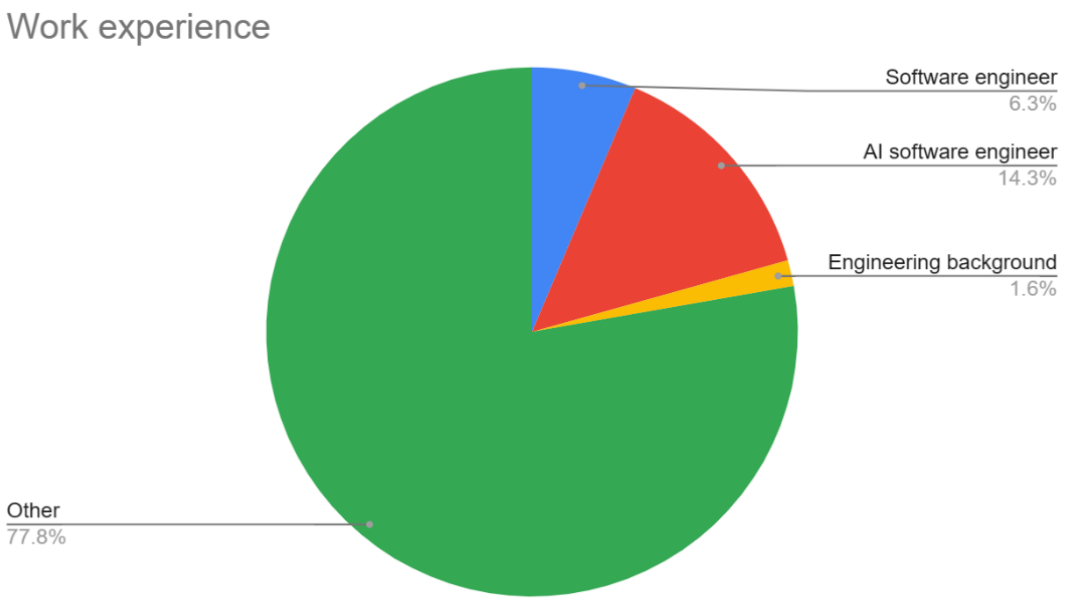
Education

Other non-tech degree takes a leading place among higher education of 63 officials, working in 5 government bodies (The All-Party Parliamentary Group on Artificial Intelligence, The Department for Science, Innovation and Technology, AI in Weapon Systems Committee, The Centre for Data Ethics and Innovation and AI Council). The majority of government officials are holding other non-tech degrees, followed by Economics (21%) and Computer Science (16.1%).



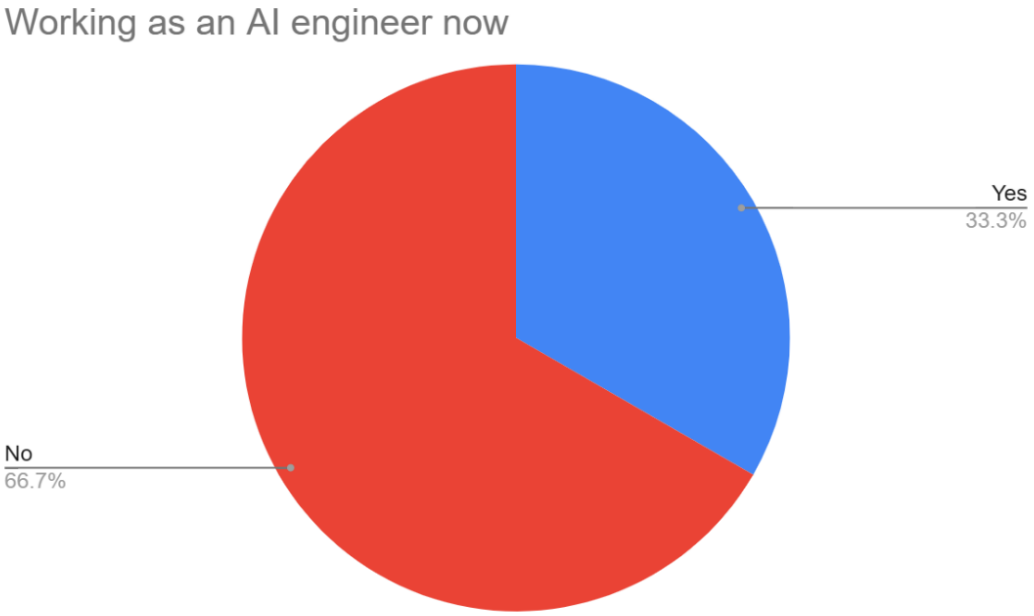
Work experience

There's a strong correlation between higher education and work experience in the UK, as 77.8% of respondents have other work experience and only 14.3% worked as AI software engineers.



Working as an AI engineer now

At the same time, only 33.3% of experts in the field of artificial intelligence and machine learning are working as AI engineers now, while 66.7% occupy other positions.

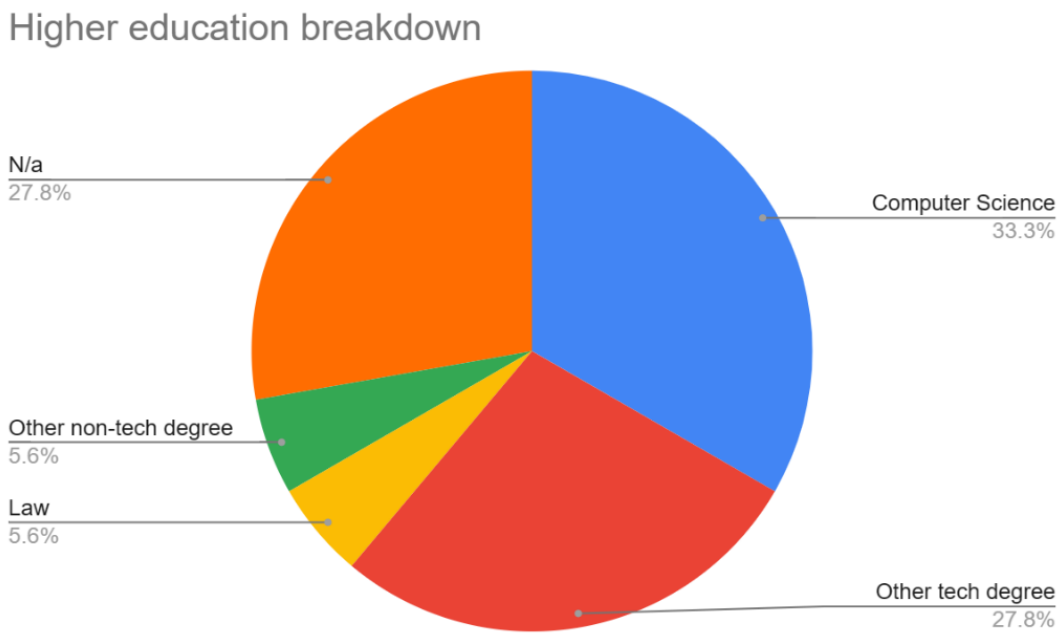


China

Education

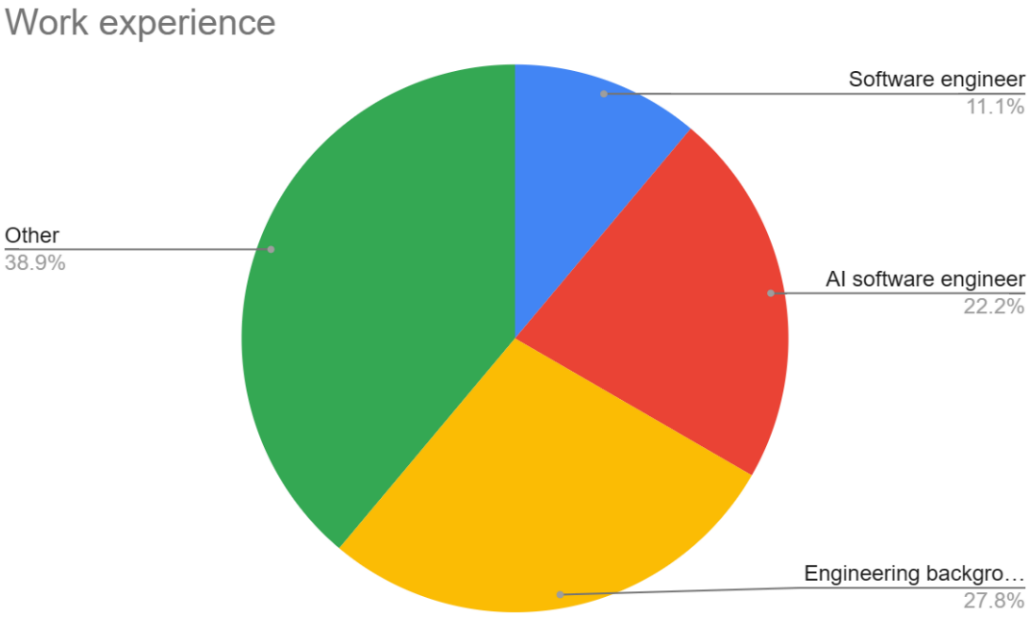
We analysed profiles of 18 government officials, working in the next four government bodies that regulate AI in China: the Ministry of Science and Technology, the Department of High and New Technology, the Ministry of Industry and Information Technology, the Cyberspace Administration of China and The National New Generation Artificial Intelligence Governance Expert Committee.

33.3% out of 14 AI experts working in the field of AI regulation and policy in China have a computer science degree. That's the highest result among all countries analysed in our research. It's followed by other tech degrees (27.8%) and law degrees (5.6%). It's important to notice that 27.8% of people do not disclose information about their education.



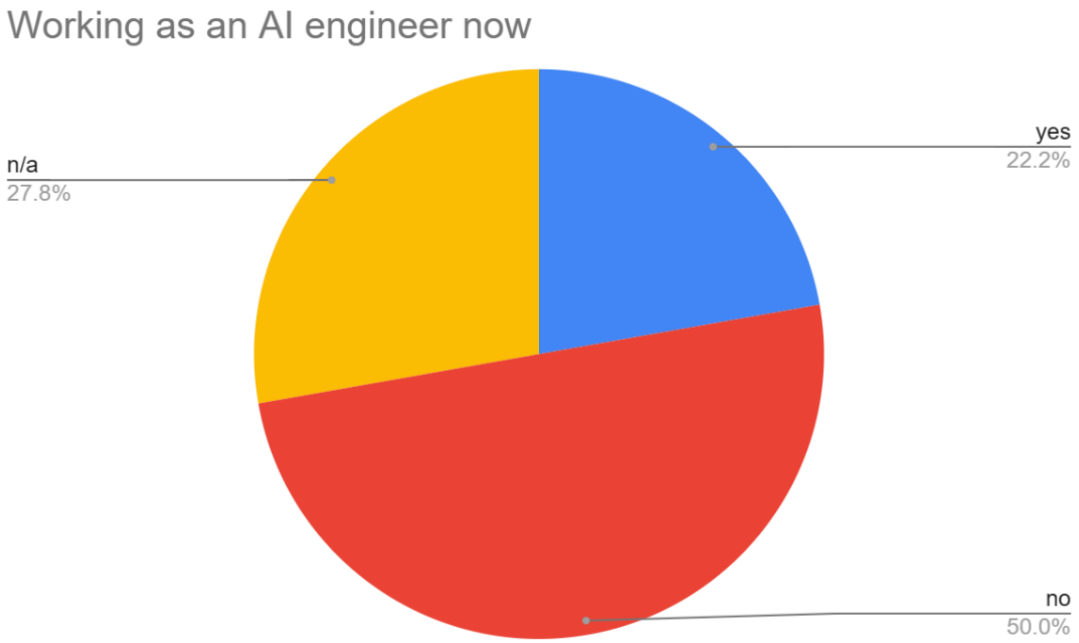
Work experience

Other work experience prevails (38.9%), followed by engineering background (27.8%) and 22.2% for AI software engineers.



Working as an AI engineer now

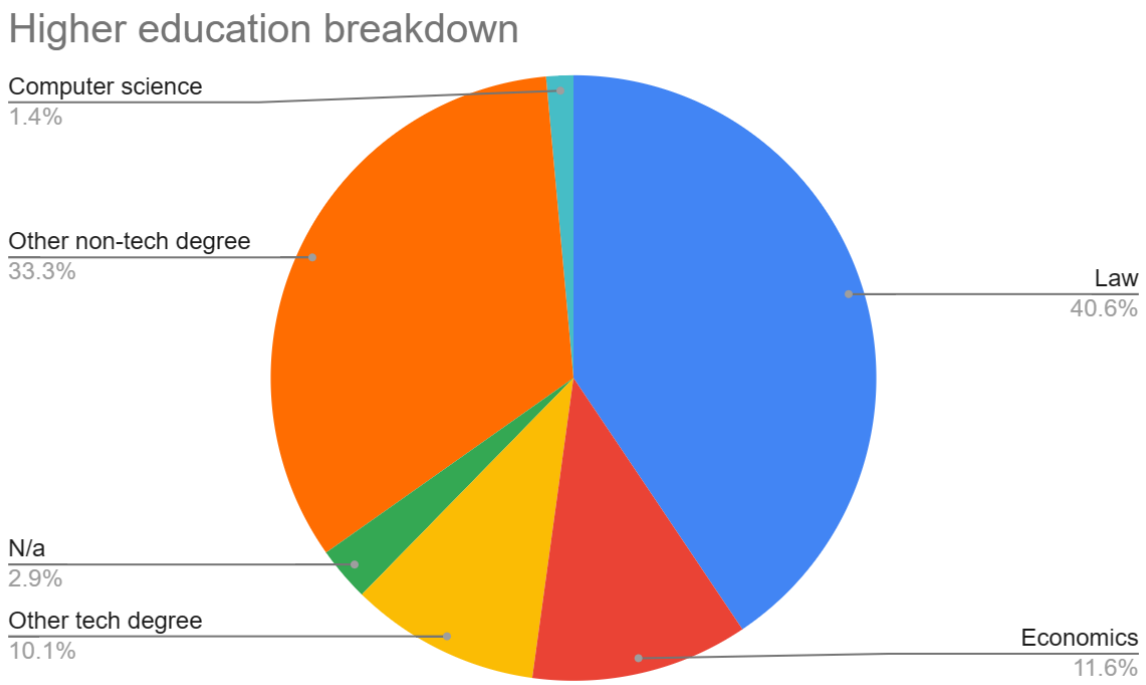
Only 22.2% are working as AI engineers right now, compared to 50% who are working in other positions.



European Union

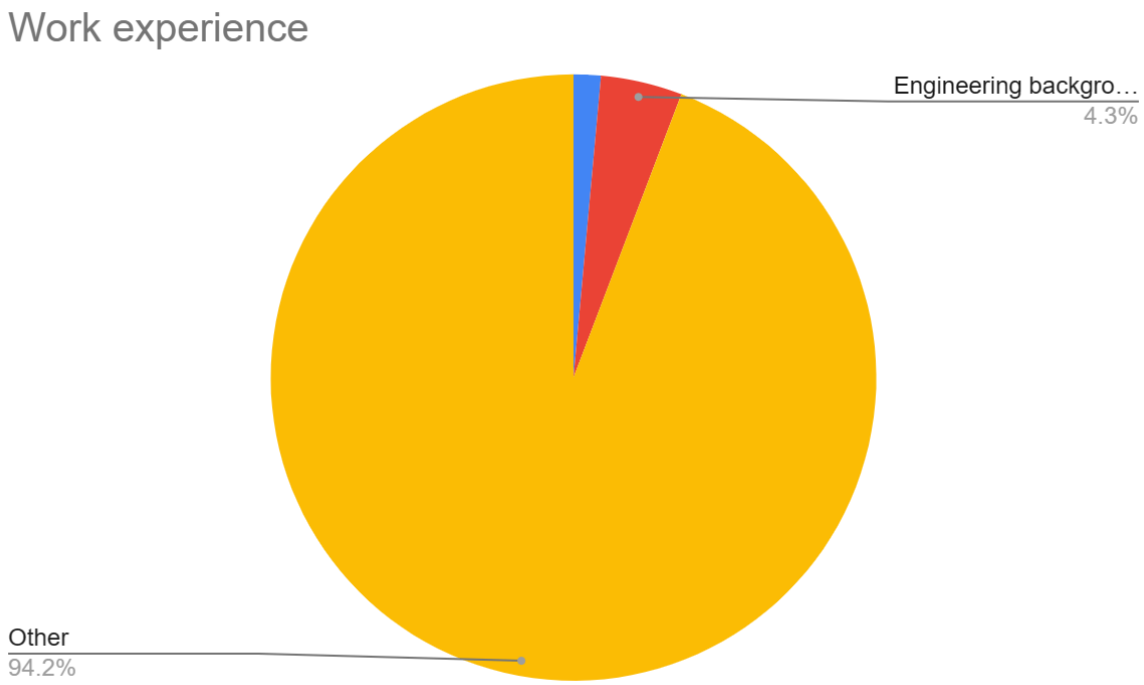
Education

In the European Union, we analysed profiles of 69 government officials, working in the Special Committee on Artificial Intelligence in a Digital Age. According to the data, 40.6% of professionals got a Law degree, followed by other non-tech degrees (33.3%) and Economics (11.6%).



Work experience

94.2% of respondents have ‘Other’ work experience, with only 4.3% having an engineering background and 1.4% - software engineering.



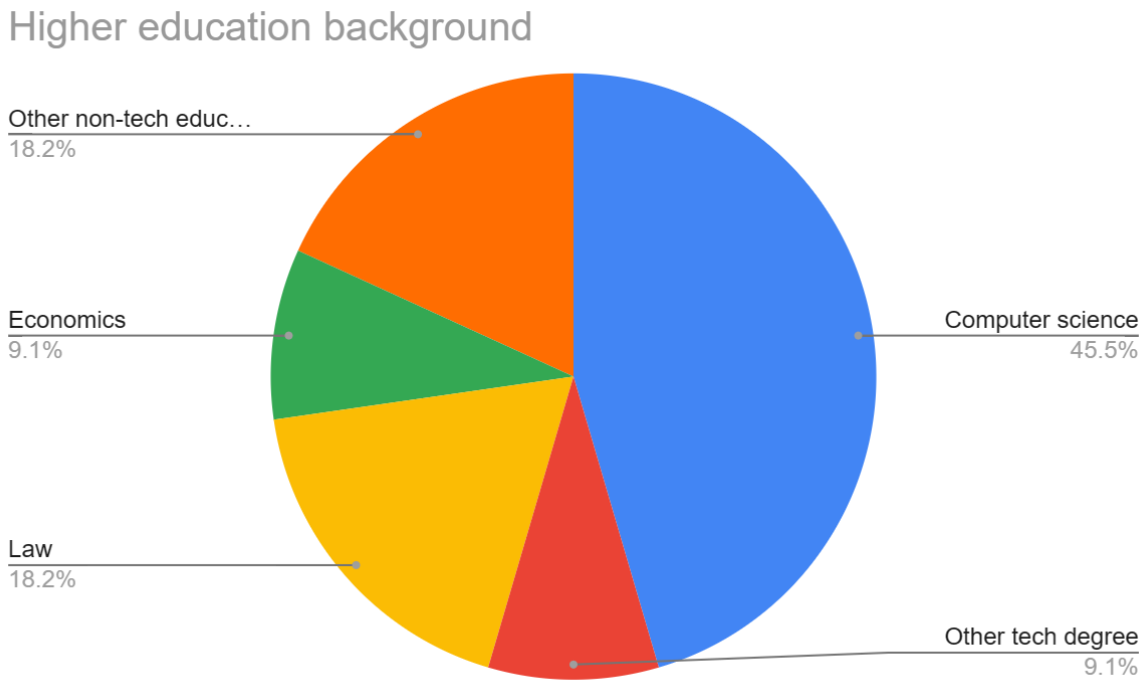
Working as an AI engineer now

100% of AI experts working in the Special Committee on Artificial Intelligence in a Digital Age (AIDA) currently not working as AI engineers.

russia

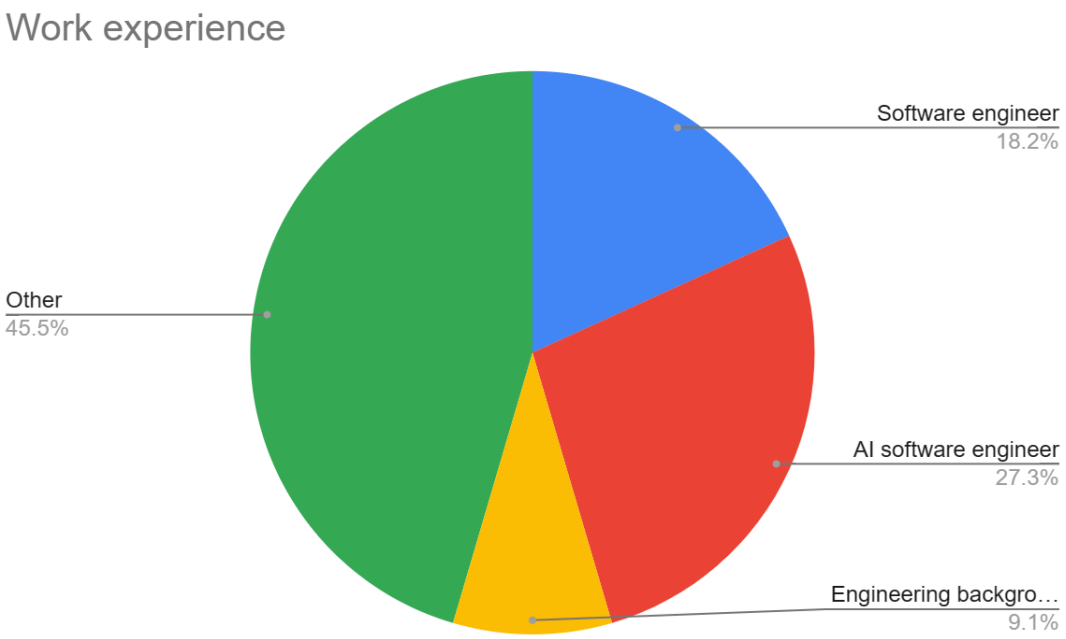
In russia we analysed profiles of 11 government officials, who are regulating AI in the Ministry of Digital Development, Communications and Mass Media of the Russian Federation and the Commission on Ethics in Artificial Intelligence. According to our analysis, the majority (45.5%) of policymakers received a Computer Science degree, followed by Law (18.2%) and Other Non-Tech Degrees (18.2%).

Education



Work experience

As for work experience, 27.3% of professionals worked as AI software engineers and 18.2% as software engineers. Also, 9.1% have an engineering background. The majority (45.5%) worked in other industries.



Working as an AI engineer now

81.8% of government officials aren't working as AI engineers now.