Secure Software Development Education 2024 Survey

28% of professionals directly involved in software development are **not familiar** with secure software development.



Software developers with **less than one year of experience** report the highest lack of familiarity (75%)





69% of professionals rely on on-the-job experience as a learning resource for secure software development, but it can take more than 5 years of such experience to achieve familiarity.



50% of professionals identify a lack of training as a major challenge for implementing secure software development, with this issue being particularly pronounced among data science roles (73%).

53% of professionals, especially those in system operations (72%), have not taken a course on secure software development, largely due to **the lack of awareness about good courses** (44%).



79% of professionals consider language-agnostic courses highly important, compared with 54% who attribute the same level of importance to language-specific courses.





Popular language-agnostic courses include **security architecture** (64%), **security education and guidance** (64%), and **secure implementation** (63%).

Training needs vary significantly based on **professional roles and experience levels**.





Python is highly favored for language-specific training, with 71% of respondents expressing a preference, although C and Java are selected more frequently when respondents rank their top choices.



57% of respondents identify **AI and ML** security as a critical area for future innovation and attention in secure software development.

56% of respondents see **supply chain security** as a crucial area needing increased focus and innovation.



To start mitigating the need for more secure software development education, the OpenSSF selected **Security Architecture as the topic of a new course**.



