## Al Legal Survey

Start of Block: Consent

# CF1 Investigating Developer Understanding and Legal Impact of Al Code Generation Technologies on Developers

#### RESEARCH PROCEDURES

The purpose of this study is to investigate issues, attitudes, and perceptions related to the use of Al code generation technologies and their impact related to software copyright and licensing – in particular, identifying real-world pain points and gathering developer experiences across different scenarios.

If you decide to participate, you will take a brief survey via the Qualtrics platform. The study will last about 15-20 minutes during which time you will be asked questions regarding your familiarity and experience with several topics related to the use of generative AI technologies to develop source code.

With your permission, we may contact you by email and invite you to participate in a follow-up interview.

#### **RISKS AND BENEFITS**

There are no foreseeable risks for participating in this research.

There are no benefits to you as a participant other than to further research in software engineering and open-source software licensing.

#### **PARTICIPATION**

You must be at least 18 years old to participate.

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party.

Your decision whether or not to participate will not prejudice your future relations with [INSTITUION].

#### CONFIDENTIALITY

The data collected by this study will be confidential, including your responses. Any information obtained in connection with this study and that can be identified with you will remain confidential and disclosed only with your permission. You will be assigned a code number to protect your identity and all data will be kept secure. If you give us your permission by signing this document, we plan to disclose the results of the questionnaire in any publication resulting from this study. The disclosed results will not be personally identifiable (if necessary, they will be anonymized). The de-identified data could be used for future research without additional consent from participants.

The Institutional Review Board (IRB) and Protection of Human Subjects (PHSC) committees that monitor research on human subjects may inspect study records during internal auditing procedures and are required to keep all information confidential.

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CONTACT	

#### **CONSENT**

[REDACTED]

You are welcome to print this page to keep a copy of this form.

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CF2 YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE.

IF YOU WANT TO PARTICIPATE, PLEASE ENTER YOUR NAME IN THE TEXT FIELD BELOW, AND START THE SURVEY.

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**End of Block: Consent** 

Please enter your name

**Start of Block: Current Uses and Processes** 

C1 Are you generally familiar with the use of generative AI models/tools to produce source code?		
O Yes	s (1)	
○ No	(2)	
Display This	s Question:	
	ou generally familiar with the use of generative AI models/tools to produce source code? =	
C2 Have y	ou incorporated code generation AI models/tools into your development workflow?	
O Yes	s (1)	
○ No	(2)	
Display This	2. Quastion:	
	you incorporated code generation AI models/tools into your development workflow? = Yes	
C3 Which	code generation AI models/tools do you typically use?	
	Bard (4)	
	ChatGPT-3.5 (5)	
	ChatGPT-4 (6)	
	GitHub Copilot (7)	
	Amazon CodeWhisperer (8)	
	Claude (Anthropic) (any version) (9)	
	Other (please provide a list below) (12)	
	<del></del>	

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If Have you incorporated code generation AI models/tools into your development workflow? = Yes

C4 Please de models/tools.	scribe the types of development tasks for which you have used code generation Al
	Test case generation (4)
	Code documentation (5)
	Writing source code (6)
	Prototyping/mocking (8)
	Creating user interfaces (9)
	Code styling and formatting (to meet employer or community standards) (10)
	Refactoring (11)
	Other (please explain) (7)
Display This Q If Have yo	uestion: u incorporated code generation AI models/tools into your development workflow? = Yes
C5 What ben	efits, if any, have you obtained through the use of code generation AI
-	

### Display This Question:

If Have you incorporated code generation AI models/tools into your development workflow? = Yes

C6 What problems or gaps, if any, have you encountered when using code generation Al models/tools?
Display This Question:  If Have you incorporated code generation AI models/tools into your development workflow? = Yes
ii nave you incorporated code generation Ar models/tools into your development worknow? = res
C7 Which of the following best describes your approach to the terms of service (TOS) for the code generation AI models/tools that you use?
I always read the terms of service in full (1)
O I sometimes read the terms of service in full, depending on the tool (2)
O I never read the terms of service in full but may skim them (3)
O I never read or skim the terms of service (4)
Display This Question:
If Have you incorporated code generation AI models/tools into your development workflow? = No
C8 Please explain your reasons for not incorporating code generation AI models/tools into your workflow.
<del></del>

Display This Question:  If Are you generally familiar with the use of generative AI models/tools to produce source code? = Yes
C9 Does your organization permit the use of code generation AI models/tools in your work?
○ Yes (1)
○ No (2)
O I don't know (3)
O Partially or under certain conditions (please specify) (4)
Display This Question:
If Does your organization permit the use of code generation AI models/tools in your work? = Yes
Or Does your organization permit the use of code generation AI models/tools in your work? = Partially or under certain conditions (please specify)
C10 Do you or your organization have a process for documenting how and where code generation AI models/tools are used in your projects?
○ Yes (1)
O No (2)
O I don't know (3)
Display This Question:
If Do you or your organization have a process for documenting how and where code generation AI model = Yes

C11 What ty	pes of information are recorded during this process?
	Noting the usage of a code generation tool (4)
	Documenting the prompt used to generate code (5)
	Documenting the entire interaction with a code generation tool (6)
	Other (please explain) (7)
Display This	Question:
If Does y	our organization permit the use of code generation AI models/tools in your work? = No
	your understanding of why your organization does not permit the use of code Al models/tools in your work?
End of Bloo	k: Current Uses and Processes
Start of Blo	ck: Understanding and Perception of Copyright Issues
Q The next s	

and/or license violations.
O Strongly disagree (1)
O Somewhat disagree (2)
O Neither agree nor disagree (3)
O Somewhat agree (4)
O Strongly agree (5)
U2 The ongoing litigation involving code generation AI models/tools is likely to result in limitations on the use of such models/tools going forward.  Strongly disagree (1)  Somewhat disagree (2)  Neither agree nor disagree (3)  Somewhat agree (4)  Strongly agree (5)

U3 My or my organization's use of code generation AI models/tools creates potential legal risks.
O Strongly disagree (25)
O Somewhat disagree (26)
O Neither agree nor disagree (27)
○ Somewhat agree (28)
O Strongly agree (29)
O Not Applicable (30)
U4 Developers' workflow should be structured to take account of potential legal risks in using code generation AI models/tools.
O Strongly disagree (1)
O Somewhat disagree (2)
O Neither agree nor disagree (3)
O Somewhat agree (4)
O Strongly agree (5)

U5 If a developer's source code is copied, the developer should receive monetary compensation.
O Strongly disagree (1)
O Somewhat disagree (2)
O Neither agree nor disagree (3)
O Somewhat agree (4)
O Strongly agree (5)
U6 If a developer's source code is copied, the developer should receive attribution.
○ Strongly disagree (1)
O Somewhat disagree (2)
Neither agree nor disagree (3)
O Somewhat agree (4)
O Strongly agree (5)

code generation AI model/tool, I would be
Extremely displeased (1)
O Somewhat displeased (2)
O Neither pleased nor displeased (3)
O Somewhat pleased (4)
O Extremely pleased (5)
U8 If I learned that a code generation AI model/tool was creating new code that resembles code that I have produced, I would be
Extremely displeased (1)
O Somewhat displeased (2)
O Neither pleased nor displeased (3)
O Somewhat pleased (4)
O Extremely pleased (5)
U9 If I learned that someone, without my permission, copied a prompt that I developed for use
in connection with a code generation AI model/tool, I would be
Extremely displeased (1)
O Somewhat displeased (2)
O Neither pleased nor displeased (3)
O Somewhat pleased (4)
Extremely pleased (5)

U7 If I learned that code that I produced was used without my permission as training data for a

U10 (Option section.	al) Feel free to comment or expand on any of your answers to the questions in this
U11 I believ apply):	e that the copyright to code that is generated through the use of AI (select all that
(1)	Belongs to the creators whose works were used as training data for the output
	Belongs to the creators of the model (such as OpenAI) (2)
	Belongs to the developer who prompted the model (or their employer) (3)
	Belongs to no one (i.e., is in the public domain) (4)
	Don't know/No opinion (5)
	Other (please explain) (6)

U12 How confident are you in the answer that you gave to the previous question?							
O Very unconfident (1)							
O Somewhat unconfident (2)							
O Neither confident nor unconfident (3)							
O Somewhat confident (4)							
O Very confident (5)							
U13 (Optional) To the extent you are willing, please explain your reasoning for the answer you gave regarding copyright ownership of code generated through the use of AI.							
U14 In your opinion, what are other software development tasks besides code generation/documentation where the use of generative AI models could lead to legal issues?							
End of Block: Understanding and Perception of Copyright Issues							

**Start of Block: Demographics** 

Di Please Indicate where your age fails in the ranges listed below.					
O 18-19 (1)					
O 20-29 (2)					
O 30-39 (3)					
O 40-49 (4)					
O 50-59 (5)					
O 60-69 (6)					
O 70+ (7)					
D2 How many years have you worked in software development?					
O < 1 year (10)					
1-4 years (7)					
○ 5-9 years (8)					
O 10-19 years (9)					
O 20-29 years (11)					
O 30+ years (12)					

D3 How many	D3 How many years of experience do you have working with machine learning/Al?							
○ < 1 ye	○ < 1 year (4)							
○ 1-4 ye	O 1-4 years (5)							
○ 5-9 ye	○ 5-9 years (6)							
O 10-19	O 10-19 years (7)							
O 20-29	O 20-29 years (8)							
○ 30+ ye	ears (9)							
D4 Which pro	ogramming language(s) do you primarily use?							
	C / C++ (8)							
	C# (7)							
	Golang (11)							
	Java (6)							
	JavaScript (5)							
	PHP (9)							
	Python (4)							
	R (10)							
	Other (please specify) (12)							

D5 What is the	nature of your development work?								
	Proprietary software developer (1)								
	Open-source software developer (2)								
	I am based at a research or educational institution (3)								
	Other (please explain) (4)								
D6 What count employed)?	ry is your organization based in (or the country where you reside, if you are self-								
D7 Have you h	ad any formal training in copyright law and/or the legal implications of using code nodels/tools?								
O Yes (1)									
O No (2)									
Display This Que	estion:								
	had any formal training in copyright law and/or the legal implications of using code gen								
D8 Was this tra	aining provided by your employer or something you sought out on your own?								
OProvide	d by my employer (1)								
O Sought	out on my own (2)								
O Both pro	ovided by my employer and sought out on my own (3)								
End of Block:	Demographics								

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CI1 If you would be willing to be contacted for an interview to further explore your responses to this survey, please enter your e-mail address below.

**End of Block: Contact information**