

Table I: RQ₂ – Full table of task allocation for GPT, DeepSeek, and Claude.

	GPT					DeepSeek					Claude				
Role	US	BR	IN	UK	NG	US	BR	IN	UK	NG	US	BR	IN	UK	NG
.net developer	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
.net/# developer	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
ai developer	31.03%	6.90%	6.90%	31.03%	24.14%	54.17%	0.00%	2.08%	31.25%	12.50%	-	-	-	-	-
ai engineer	-	-	-	-	-	25.00%	0.00%	0.00%	8.33%	66.67%	20.00%	0.00%	5.00%	65.00%	10.00%
ai researcher	-	-	-	-	-	0.00%	83.33%	0.00%	16.67%	0.00%	-	-	-	-	-
ai specialist	7.69%	0.00%	0.00%	92.31%	0.00%	7.14%	0.00%	0.00%	92.86%	0.00%	-	-	-	-	-
ai/machine learning engineer	-	-	-	-	-	-	-	-	-	-	15.79%	21.05%	0.00%	63.16%	0.00%
ai/ml developer	0.00%	0.00%	63.64%	36.36%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	86.67%	13.33%	0.00%
ai/ml engineer	-	-	-	-	-	-	-	-	-	-	14.29%	0.00%	14.29%	66.67%	4.76%
amateur pentester	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
analyst	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
analytics engineer	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
android app developer	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
android architect	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
android developer	31.25%	0.00%	68.75%	0.00%	0.00%	22.22%	0.00%	77.78%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	0.00%
application development engineer	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
aspiring software engineer	70.00%	0.00%	0.00%	10.00%	20.00%	-	-	-	-	-	-	-	-	-	-
back end developer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
backend	-	-	-	-	-	0.00%	0.00%	55.56%	38.89%	5.56%	-	-	-	-	-
backend developer	14.41%	35.13%	12.61%	4.50%	33.33%	9.90%	43.23%	10.42%	15.62%	20.83%	12.12%	31.94%	20.45%	17.05%	18.43%
backend engineer	-	-	-	-	-	22.22%	77.78%	0.00%	0.00%	0.00%	37.93%	41.38%	0.00%	20.69%	0.00%
backend software developer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
backend software engineer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
beginner programmer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
blockchain developer	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	2.94%	97.06%	0.00%	0.00%	4.44%	22.22%	73.33%
business analyst	10.71%	0.00%	67.86%	17.86%	3.57%	0.00%	0.00%	90.00%	10.00%	0.00%	47.37%	0.00%	52.63%	0.00%	0.00%
business app developer	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
business intelligence analyst	90.91%	9.09%	0.00%	0.00%	0.00%	-	-	-	-	-	53.85%	0.00%	0.00%	46.15%	0.00%
c++ developer	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
cfđ engineer	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
cloud architect	-	-	-	-	-	0.00%	0.00%	41.18%	58.82%	0.00%	0.00%	7.14%	35.71%	57.14%	0.00%
cloud developer	-	-	-	-	-	-	-	-	-	-	0.00%	4.54%	45.45%	31.82%	18.18%
cloud engineer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	64.71%	29.41%	0.00%	5.88%
cloud software developer	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
cloud specialist	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
computer engineer	-	-	-	-	-	34.78%	21.74%	0.00%	39.13%	4.35%	-	-	-	-	-
computer science engineer	-	-	-	-	-	56.25%	37.50%	6.25%	0.00%	0.00%	-	-	-	-	-
computer science graduate	-	-	-	-	-	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
computer science student	0.00%	55.56%	11.11%	33.33%	0.00%	0.00%	56.00%	4.00%	40.00%	0.00%	-	-	-	-	-
computer vision engineer	-	-	-	-	-	55.56%	0.00%	0.00%	44.44%	0.00%	-	-	-	-	-
content creator	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
cyber security	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
cybersecurity analyst	0.00%	0.00%	0.00%	90.00%	10.00%	45.45%	0.00%	0.00%	50.00%	4.54%	-	-	-	-	-
cybersecurity developer	-	-	-	-	-	-	-	-	-	-	38.46%	0.00%	7.69%	23.08%	30.77%
cybersecurity engineer	-	-	-	-	-	28.57%	0.00%	3.57%	35.71%	32.14%	-	-	-	-	-
cybersecurity expert	0.00%	0.00%	16.67%	16.67%	66.67%	-	-	-	-	-	-	-	-	-	-
cybersecurity professional	90.00%	0.00%	0.00%	0.00%	10.00%	-	-	-	-	-	-	-	-	-	-
cybersecurity specialist	4.35%	0.00%	13.04%	52.17%	30.43%	18.75%	0.00%	21.88%	9.38%	50.00%	41.10%	4.11%	5.48%	28.77%	20.55%
data analyst	15.05%	14.56%	16.50%	19.42%	34.47%	17.72%	12.14%	20.39%	16.50%	33.25%	17.46%	18.09%	13.97%	12.38%	38.09%
data engineer	22.03%	32.20%	16.95%	8.47%	20.34%	17.61%	35.91%	14.09%	15.49%	16.90%	21.71%	27.63%	15.79%	18.42%	16.45%
data enthusiast developer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
data professional	0.00%	0.00%	0.00%	47.06%	52.94%	-	-	-	-	-	-	-	-	-	-
data science enthusiast	25.00%	0.00%	75.00%	0.00%	0.00%	80.00%	0.00%	20.00%	0.00%	0.00%	-	-	-	-	-
data scientist	12.94%	16.86%	8.23%	43.14%	18.82%	16.38%	19.16%	9.41%	32.75%	22.30%	12.77%	23.05%	7.09%	29.79%	27.30%
data scientist & ML engineer	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
data specialist	-	-	-	-	-	0.00%	30.77%	0.00%	69.23%	0.00%	-	-	-	-	-
database administrator	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
deep learning engineer	-	-	-	-	-	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
designer	-	-	-	-	-	9.09%	0.00%	45.45%	0.00%	45.45%	-	-	-	-	-
developer	14.13%	16.85%	19.02%	23.37%	26.63%	6.17%	23.14%	38.82%	11.82%	20.05%	-	-	-	-	-
devops	0.00%	43.75%	0.00%	0.00%	56.25%	0.00%	80.00%	0.00%	10.00%	10.00%	-	-	-	-	-
devops engineer	4.65%	6.98%	25.58%	25.58%	37.21%	10.31%	2.06%	22.68%	29.90%	35.05%	18.71%	15.50%	25.73%	23.10%	16.96%
devsecops specialist	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
electrical and computer engineer	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
electrical engineer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
electronic engineering	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
embedded software engineer	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
embedded systems developer	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	71.43%	28.57%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
embedded systems engineer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	38.46%	61.54%	0.00%	0.00%	0.00%
flutter developer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	90.00%	10.00%
front end developer	22.00%	56.00%	0.00%	2.00%	20.00%	17.24%	56.90%	8.62%	0.00%	17.24%	26.67%	73.33%	0.00%	0.00%	0.00%
front end lead	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
frontend	-	-	-	-	-	0.00%	45.45%	50.00%	4.54%	0.00%	-	-	-	-	-
frontend developer	1.32%	17.89%	18.68%	8.95%	53.16%	5.37%	20.08%	19.48%	9.54%	45.53%	11.91%	25.26%	17.04%	11.19%	34.60%
frontend web developer	47.62%	0.00%	0.00%	0.00%	52.38%	-	-	-	-	-	-	-	-	-	-

	GPT					DeepSeek					Claude				
full stack	-	-	-	-	-	28.12%	0.00%	3.12%	0.00%	68.75%	-	-	-	-	-
full stack and mobile developer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
full stack developer	10.18%	34.39%	21.58%	15.79%	18.07%	11.30%	32.03%	24.35%	16.52%	15.80%	15.41%	33.53%	21.06%	11.29%	18.71%
full stack engineer	16.67%	0.00%	0.00%	0.00%	83.33%	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
full stack software engineer	20.00%	0.00%	0.00%	0.00%	80.00%	58.82%	0.00%	0.00%	0.00%	41.18%	-	-	-	-	-
full stack web developer	0.00%	0.00%	18.52%	0.00%	81.48%	-	-	-	-	-	-	-	-	-	-
game designer	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
game developer	23.71%	30.93%	4.12%	40.21%	1.03%	11.83%	33.33%	10.75%	43.01%	1.07%	15.96%	30.85%	4.25%	40.43%	8.51%
games programmer	-	-	-	-	-	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
gaming	-	-	-	-	-	56.25%	43.75%	0.00%	0.00%	0.00%	-	-	-	-	-
informatics technical officer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
intern	0.00%	16.67%	83.33%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
ios developer	36.36%	63.64%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	64.29%	35.71%	0.00%	0.00%	0.00%
it manager & developer	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
java developer	0.00%	100.00%	0.00%	0.00%	0.00%	9.38%	90.62%	0.00%	0.00%	0.00%	0.00%	88.23%	5.88%	5.88%	0.00%
java full stack developer	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
junior data analyst	80.00%	20.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
junior developer	20.65%	15.22%	35.87%	27.17%	1.09%	15.38%	55.38%	23.08%	0.00%	6.15%	6.77%	22.18%	42.86%	18.42%	9.77%
junior programmer	0.00%	92.31%	0.00%	7.69%	0.00%	-	-	-	-	-	-	-	-	-	-
junior software engineer	-	-	-	-	-	-	-	-	-	-	0.00%	7.69%	15.38%	53.85%	23.08%
junior web developer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	46.15%	7.69%	0.00%	15.38%	30.77%
language processing developer	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
machine learning engineer	5.00%	0.00%	35.00%	35.00%	25.00%	10.35%	0.00%	51.72%	13.79%	24.14%	11.49%	1.15%	40.23%	27.59%	19.54%
machine learning enthusiast	0.00%	0.00%	92.86%	0.00%	7.14%	-	-	-	-	-	-	-	-	-	-
magento developer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
management	-	-	-	-	-	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
mern stack developer	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
mernstack developer	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
mlops engineer	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	100.00%	0.00%	0.00%
mobile app developer	0.00%	55.56%	0.00%	0.00%	44.44%	-	-	-	-	-	-	-	-	-	-
mobile application engineer	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
mobile developer	-	-	-	-	-	0.00%	37.84%	0.00%	35.13%	27.03%	2.30%	27.59%	31.03%	18.97%	20.11%
mobile software engineer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
mobile/backend developer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
opensource developer	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
oracle apps dba	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
problem solver	-	-	-	-	-	0.00%	55.56%	0.00%	0.00%	44.44%	-	-	-	-	-
product designer	0.00%	0.00%	33.33%	19.05%	47.62%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
product manager	-	-	-	-	-	-	-	-	-	-	17.78%	0.00%	15.56%	22.22%	44.44%
product owner	-	-	-	-	-	9.09%	90.91%	0.00%	0.00%	0.00%	-	-	-	-	-
programmer	17.24%	6.90%	37.93%	3.45%	34.48%	66.67%	0.00%	13.33%	0.00%	20.00%	-	-	-	-	-
project controller	-	-	-	-	-	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
project manager	4.35%	43.48%	0.00%	47.83%	4.35%	0.00%	80.00%	0.00%	0.00%	20.00%	0.00%	8.57%	0.00%	40.00%	51.43%
python developer	27.78%	20.37%	1.85%	35.19%	14.81%	0.00%	24.07%	0.00%	38.89%	37.04%	13.51%	18.92%	2.70%	24.32%	40.54%
qa engineer	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	21.74%	52.17%	8.70%	8.70%	8.70%
qa tester	-	-	-	-	-	-	-	-	-	-	0.00%	90.00%	0.00%	0.00%	10.00%
quantitative researcher	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
react developer	-	-	-	-	-	-	-	-	-	-	0.00%	0.00%	95.00%	5.00%	0.00%
research developer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
researcher	69.23%	15.38%	0.00%	15.38%	0.00%	-	-	-	-	-	-	-	-	-	-
robotics engineer	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	90.00%	10.00%	0.00%	0.00%	0.00%
sdet	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
security engineer	-	-	-	-	-	-	-	-	-	-	27.27%	59.09%	0.00%	13.64%	0.00%
senior full stack developer	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	58.33%	0.00%	41.67%	0.00%	0.00%
senior lead platform engineer	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-	-	-	-	-	-
senior python software engineer	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
senior software engineer	100.00%	0.00%	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%	0.00%	0.00%	38.89%	16.67%	44.44%	0.00%	0.00%
senior ux designer	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
smart contract developer	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
software developer	18.20%	30.44%	26.87%	12.76%	11.73%	20.49%	27.39%	25.61%	12.70%	13.81%	16.67%	29.63%	24.07%	16.67%	12.96%
software development analyst	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
software engineer	14.36%	16.55%	14.84%	22.14%	32.12%	21.88%	19.60%	14.21%	22.73%	21.59%	27.16%	16.05%	14.20%	19.14%	23.46%
software engineer intern	76.92%	0.00%	15.38%	7.69%	0.00%	-	-	-	-	-	-	-	-	-	-
software engineering student	0.00%	3.23%	0.00%	83.87%	12.90%	0.00%	33.33%	0.00%	66.67%	0.00%	-	-	-	-	-
system analyst	-	-	-	-	-	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
systems analyst	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
technical officer	-	-	-	-	-	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
typescript developer	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
ui/ux designer	46.34%	24.39%	29.27%	0.00%	0.00%	44.90%	20.41%	34.69%	0.00%	0.00%	34.07%	23.08%	26.37%	8.79%	7.69%
ux designer	0.00%	76.92%	7.69%	0.00%	15.38%	0.00%	52.94%	0.00%	0.00%	47.06%	12.50%	18.75%	0.00%	34.38%	34.38%
ux/ui designer	-	-	-	-	-	-	-	-	-	-	7.69%	38.46%	0.00%	23.08%	30.77%
visual designer	-	-	-	-	-	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
web designer	0.00%	0.00%	10.00%	0.00%	90.00%	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	-
web developer	10.04%	20.41%	38.75%	10.73%	20.07%	9.05%	23.28%	36.64%	7.76%	23.28%	5.92%	28.99%	23.67%	14.20%	27.22%
web3 developer	36.36%	0.00%	63.64%	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-
wordpress developer	0.00%	28.00%	32.00%	40.00%	0.00%	0.00%	8.33%	83.33%	8.33%	0.00%	0.00%	42.86%	23.81%	33.33%	0.00%