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Simon Kuznets
Kharkiv National University of Economics
Nauky Ave, 9A
Kharkiv, Kharkivs'ka oblast
Ukraine, 61000

Re: Ivan Karavaiev internship at Google Ireland Limited

To whom it may concern

Dear madam or sir,

By this letter I confirm that Ivan Karavaiev has successfully completed an internship program at Google Ireland under my supervision from 21st of August to 15th of December, 2023. During his internship Ivan has successfully implemented a new feature for an internal continuous deployment system. Most teams in the company use this system to deliver new versions of the software to production systems and to our users.

During the term of his internship Ivan had an opportunity to learn new technologies and become familiar with processes we use during software development and support. The project assigned to Ivan presented a number of challenges, among which were:

- large and complex infrastructure with many interdependent components;
- low level of components which required changes;
- unique internal development environment
- and so on.

Despite these challenges the project was completed fully, in time and according to Google standards. Results of Ivan's work include code, unit-tests, documentation and presentation of the project to the team. Requirements to the code and other artefacts produced by Ivan were exactly the same as those of any other engineer at Google.

Successful completion of this project allows our continuous deployment system to better satisfy requirements of other teams at Google and also unblocks the path for further improvements.

I would like to take this opportunity to thank the Kharkiv National University of Economics for preparing Ivan for this internship and corresponding challenges.

Sincerely yours,



Oleg Sharoyko
Site Reliability Engineer
Google Ireland