IndieBl Spółka Akcyjna Polskiej Organizacji Wojskowej 25 90-248 Łódź

## Letter of Recommendation

June 14, 2023

To Whom It May Concern,

Marek Szumny successfully completed his internship in IndieBI from May 2023 to June 2023.

During his internship, Marek distinguished himself by:

- Being highly involved since day 1,
- Exhibiting a great deal of independence at work,
- Showing a positive attitude towards developing himself.

Marek's significant achievements were:

Creating the first set of end-to-end tests in TypeScript and the Playwright framework (page object model) for the IndieBI desktop application based on the Electron framework, specifically:

- Automating test coverage of the new user registration process:
  - Executing the "Happy Path," including account activation procedures, which required integration of tests with external services (APILayer / Microsoft Graph API) to help extract information from emails sent to test users
  - Checking the compatibility of interface elements at each stage of the process, their correct functioning, and text content
  - Verifying negative paths, such as entering incorrect or expired data, and validating error notifications
- Proposing and initially implementing the architecture of the internal test framework, using helper classes for reusable components used in the application
- · Producing a documentation file describing how to run and debug created tests

I confidently recommend Marek Szumny for further opportunities, as his dedication and technical skills have proven valuable to our team at IndieBI.

Marcin Graczyk, Engineering Manager at IndieBI

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