

View results

Respondent

3

Michael Karpov

07:31

Time to complete

1. Date of this semester progress report submission *

5/26/2025

2. Name of project exactly as it was listed in your award letter *

The Safe Pyrotechnic Analyzer Reusable Kit (SPARK)

3. Date of original award letter *

November 9, 2023

4. Date of expiration listed on award letter (or on scope change approval if more recent) *

November 2, 2025

5. How much was your award (i.e., original award plus any approved budget increases)? *

\$1980.00

6. How much of your award has been spent to date (in dollars)? *

\$1919.06

7. Date of forecasted project completion *

November 2025

8. Have you submitted one or more semester progress reports previously? *

☒ YES

☐ NO

9. Describe, in detail, what has been completed on the project since the last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

Though the first round of boards has been ordered, assembled, and to an extent tested, the project has remained mostly stagnant due to a lack of software support for the HITL infrastructure that the boards were intended to support. We hope that as our team's goals shift towards more test-driven development, we will be able to reinvigorate the project and continue testing. We believe that we are close to a design milestone that will allow for this board to effectively test the efficacy of not only our in-house developed components, but also commercial ones to limit the use of single-use pyrotechnic e-matches.

10. Describe, in detail, the project's challenges/obstacles since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

As described in the previous section, one of the largest challenges has been receiving the necessary software and testing support to determine the faults with the current boards. As such development has been quite slow, however we believe that the team will be in a better position to pivot and close out this project in the near future.

11. Describe, in detail, the project's successes since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

The boards have been tested to an extent and several defects have been identified, allowing us to kickstart the development of the next iteration of the boards. Unfortunately due to issues mentioned above, the boards will require more testing to be completed to be able to effectively spec out a MK2 prototype or a final board.

12. Did your project have any changes to its team that SSC should know about (e.g., project lead, faculty/staff advisor, departmental financial contact)? *

NOTE: If yes, please complete the SSC Project Contact Information Change Form located at this link: <https://forms.office.com/r/uBjx9nmNpG>

☒ YES

☐ NO

13. Complete and upload the semester financial documentation for your project. You should reflect all expenditures since your last semester project report. We strongly suggest that you also upload supporting financial documentation from Banner for your award CFOP. NOTE: When your project is completed and/or expired (whichever comes first), any remaining project funds will be transferred back to the SSC.

<https://studentengagement.illinois.edu/sites/default/files/2024-09/SSC-Budget-Timeline-SEMESTER-PROGRESS-REPORT-template.xlsx>

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SPARK-Budget-spring-2025(2)_Michael Karpov.xlsx

14. (OPTIONAL FOR SEMESTER REPORT) Upload project marketing and/or media not previously submitted in semester progress reports.

NOTE: Project marketing and/or media must include SSC's logo and/or a statement of which fee(s) funded the project.

 [IMG 6477 Michael Karpov.JPG](#)

 [IMG 6481 Michael Karpov.JPG](#)

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