**Funding Request Proposal: ATtiny85 Microcontroller Workshop**

**Submitted by:** IEEE Student Branch  
**Position:** Luke Goldstein  
**Date of Submission:** 2/20/25  
**Event Date:** 4/2/25  
**Target Audience:** Penn State Harrisburg Students (STEM & Engineering focus)

**Event Overview**

Our organization is requesting funding to host an educational workshop on programming ATtiny85 microcontrollers using PlatformIO in Visual Studio Code. This workshop aims to provide hands-on experience in embedded systems programming, which is an essential skill for students in electrical engineering, computer science, and robotics. The workshop will include a guided tutorial on setting up the development environment, writing basic code, and deploying it to the ATtiny85. Additionally students will be provided with a sample project to take home and inspire them.

**Objectives and Educational Benefits**

* Introduce students to ATtiny85, a versatile microcontroller used in various embedded applications.
* Provide practical experience in using PlatformIO within Visual Studio Code for embedded programming.
* Enable students to develop skills in writing, compiling, and flashing firmware onto microcontrollers.
* Enhance the university's STEM initiatives by fostering interest in hardware programming.
* Encourage collaboration among students through hands-on exercises and team-based learning.

**Event Details**

* **Format:** In-person, instructor-led workshop with hands-on coding exercises.
* **Duration:** 1 hour
* **Location:** [Insert Venue]
* **Instructor(s):** Faculty member/Industry expert/Experienced student member.
* **Materials Provided:** ATtiny85 microcontrollers, USB-to-serial adapters, breadboards, jumper wires, and relevant software installation guides.
* **Expected Attendance:** 25–30 students.

**Budget Breakdown**

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| --- | --- | --- | --- |
| **Item** | **Quantity** | **Cost Per Unit** | **Total Cost** |
| ATtiny85 Microcontrollers | 30 | $3.50 | $105.00 |
| USB-to-Serial Adapters | 15 | $6.00 | $90.00 |
| Breadboards | 15 | $5.00 | $75.00 |
| Jumper Wires (packs) | 10 | $4.00 | $40.00 |
| Miscellaneous Supplies | - | - | $40.00 |
| **Total Estimated Cost** |  |  | **$350.00** |

*All purchases will be made through the Office of Student Engagement per funding guidelines.*

**Justification for Funding**

This workshop directly aligns with our organization's mission to enhance student learning in embedded systems and programming. The event will provide an engaging, hands-on experience that supports both academic and extracurricular learning. By funding this event, the Student Government Association (SGA) will be supporting skill development in a critical area of engineering and technology.

**Compliance with SGA Funding Guidelines**

* The request is being submitted at least four weeks in advance.
* An itemized quote is provided as per requirements.
* No restricted items (apparel, decorations, travel reimbursements, etc.) are included.
* The organization’s advisor has been informed of this funding request.

**Conclusion**

We appreciate SGA’s consideration of our request to fund this valuable educational opportunity for Penn State Harrisburg students. If approved, we will ensure proper execution and documentation of the event to maximize its impact on student learning.

We look forward to discussing this request at the upcoming Finance Committee meeting.

**Contact Information:**  
[Your Name]  
[Your Email]  
[Your Student Organization Name]