MSOE AI-Club: Innovation Lab Groups
AI Learning Groups Hosted by the Milwaukee School of Engineering AI-Club

The Innovation Labs initiative aims to provide a hands-on learning experience in AI for students with some group-project experience. Building on the **MSOE AI-Club's (MAIC's)** successful 'Research Groups,' where students publish novel AI research over six months, the **Innovation Lab Groups** offer a more industry-focused and accessible approach. These groups participate in a 1-2 month "hackathon," working in 8-10 person teams led by a mentor. The goal is to create solutions for real-world problems, build a network of peers seeking AI knowledge, and offer an impressive portfolio piece as a great introduction to AI development.

How Does It Work?
Each group will develop a solution over **2 months**, meeting **weekly** to discuss progress and new AI concepts with their **student/teacher mentor** and **8-10 team members**. With **30-40 hours of work** overall, sessions will include working with mentors on collaborative coding, brainstorming, and introducing new concepts via our website's learning curriculum. Students are expected to stay motivated, think critically during sessions, and dedicate time outside meetings to conduct experiments that observe AI changes. With groundbreaking AI developments emerging monthly, a key objective is to cultivate **life-long learning**.

Unlike traditional hackathons which require some baseline knowledge, we don't have that expectation: we offer a baseline model for all groups that works **out of the box.** That way, the focus can be on applying theoretical knowledge and seeing direct feedback. The challenge is then creating a unique and/or improved solution, competing with other groups as you all tackle a theme provided by the **industry sponsor**. For example, a hospital could propose a general theme of *medical imaging*, and a solution could be *building AI to detect red blood cells.*

Who Can Get Involved?
- **Universities:** We've developed a community of over 200 university students this past year and are excited to welcome other universities to join our growing AI community! Additionally, we extend the invitation to anyone interested in learning more about AI. Even if you don't have a team, we'll work with you to get involved with one!

- **K-12 Students:** It's never too early to dive into programming and AI! MAIC is eager to collaborate with middle and high school programs to teach young innovators how to build AI applications today. We welcome parents and teachers to join us, and we'll work with schools to establish local AI-Clubs, building an entire AI community!

- **Industry Partners:** Industry partners can get involved by providing theme idea(s) and monetary funding by supporting the prize pool, as well as food for the final day of presentations. Sponsors will also serve as judges on the final presentation day, evaluating student projects. MAIC will handle <u>ALL</u> event setup and coordination, making it easy for sponsors to contribute meaningfully without a significant time commitment!

If interested in participating or sponsoring a cohort of Innovation Lab Groups, please fill out **https://forms.office.com/r/vXnX4NZKkX** or contact the MAIC president directly by sending an email to **paulsonb@msoe.edu**. We will promptly arrange a meeting to explore collaboration opportunities for **October 2024!**

Please note, all teams accommodate to their members' schedules.
Your mentor will determine an appropriate length for team meetings, typically 1-2 hours. msoe-maic.com