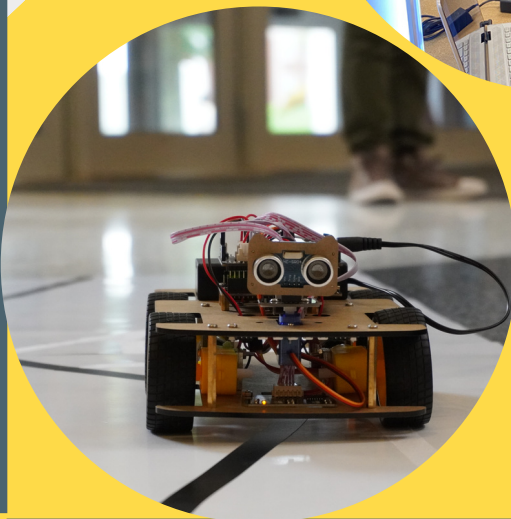# Computer Science

NEWSLETTER

The Department of Computer Science at Allegheny College has seen another successful Fall Semester! Exciting classes, a variety of events, and fantastic student projects! Join us in taking a look back at Fall 2022!
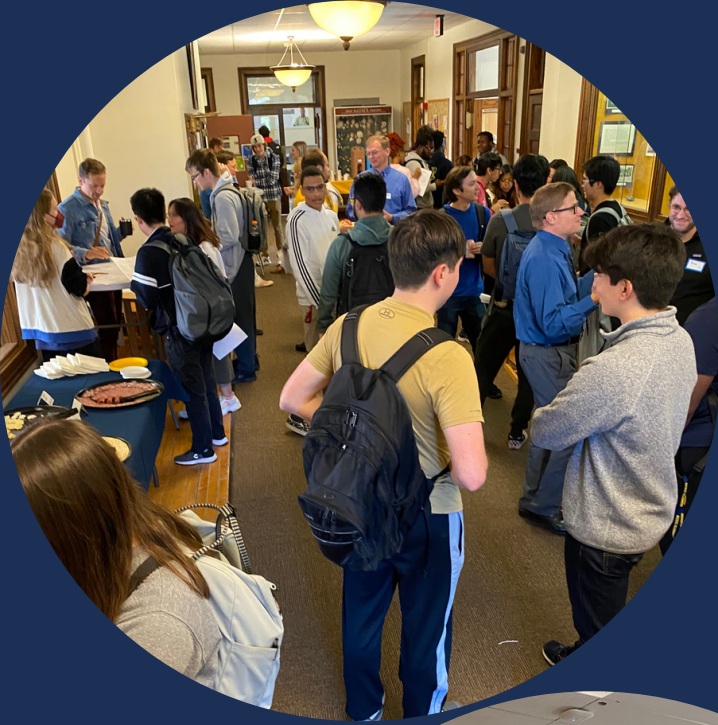
Fall 2022

Halloween Social

The Faculty and Staff had some fun dressing up for Halloween as "Scientists/Doctors". Students submitted recommendations for costumes and "Back from the Future" and "Rick and Morty" were winners! Bosco (pictured below) joined in on the fun!
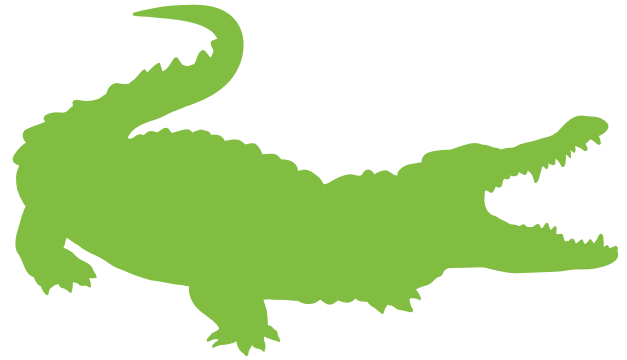

iTea made a comeback this semester. Every Friday, students had the opportunity to have snacks while chatting with their fellows of Alden Hall. Taking time to socialize and discuss computer science outside of the classroom became an important aspect of the department. We saw over 50 students almost each week gathering in the lobby for some coffee, tea, hot chocolate, popcorn, fruit, and other delicious snacks!

C.S. Student & Alumni Gathering

In late September, students, faculty, and Allegheny Alumni gathered in Alden Hall to socialize and discuss life after college. Students were allowed to ask former Gators questions about their time at Allegheny and beyond, and life in general.

The gathering started with a social that included a variety of snacks, drinks, and prizes for those that filled out "get to know" passport and bingo cards. The social was followed by Life After Allegheny: A Panel Discussion where MC Professor Luman spoke with Alumni about careers in Computer Science.

Senior Comps

Seniors have been working on variety of interesting senior comprehensive projects. We have 19 comping students, including 5 completing a double comp. This semester comping seniors developed feasible prototypes of their project idea and pitched their idea and the prototype to faculty and their fellow colleagues in class. They also wrote a part of their senior thesis document. Below is a small sampling of the projects:

- SNP Clip: A Tool to Identify Enriched Pathways Pertaining to Bladder Cancer Risk
- Digital Prophet: Predictive Analytics of Time Series Datasets Using Hyperparameter Optimization
- TwitchO7: Using Data and Web Scraping to Help Small Streamers Grow on Twitch
- CriticalJustice: Visualizing the Impact of Crime Prevention in Neighborhood Development
- Cloak Cat: A Procedural Content Generation fueled Video Game

FESTIVAL OF ROBOTS

Led by Allegheny's own robotics students and Computer Science faculty,the Festival of Robots featured exciting hands-on robot explorations, demonstrations, and simulation. This event was open to the larger Meadville community. Not only did we see Allegheny faculty and students, but also local families and school-age children. Hundreds of kids from the community got to interact and learn about robots and computer science.

There were many interactive stations that students in the Robotic Agents course created. These included robot simulations, wheeled robot navigations, robot arm manipulation, and an arena with autonomously flying drones. Besides students in the robotics course, there were also other computer science students volunteering their time for the event. One of the volunteers, Simon Jones, who demonstrated a game he and his team members developed, shared with us that "Bunches of kids came up to me wanting to know about what language or framework we had used, throwing clever remarks that they knew we stole out ideas from Mario, Minecraft, etc. In these moments, I could see their gears turning; they were gathering inspiration. I have no doubt that this event was informative for the kids. Some of them probably went straight home to do their own 'tinkering'."

Another popular station was Acutec's station. Acutec is a manufacturing company specializing in airplane parts and they brought their very own robotic arm. Student Katie Burgess got to work with the folks from Acutec and shared with us, "Everyone seemed to be impressed about the size of the robot and how comfortable I was standing right next to it while it was running. A takeaway was how robots like the FANUC CRX us able to detect force and thus is safe to work directly alongside. The kids and parents alike were very interested in the code that the robot was running since it would track the specific part it was on."

After the festival, the students from the robotics class took their demonstrations to Meadville's own Second District Elementary School and presented to the students. There was a lot of interest in the demonstrations and even more excitement for next year's Festival of Robots!

Classes offered
Fall 2022

- Computational Expression taught by Professor Luman
- Computer Organization taught by Professor Mohan
- Software Innovation taught by Professor Luman
- Software Engineering taught by Professor Jumadinova
- Robotic Agents taught by Professor Jumadinova
- Bioinformatics taught by Professor Bonham-Carter
- Discrete Structures taught by Professor Bonham-Carter
- Operating Systems taught by Professor Kapfhammer
- Data Abstraction taught by Professor Kapfhammer

A big Thank You to our Technical Leaders!!!

- Adriana Solis
- Andre Hance
- Caden Hinckley
- Daniel Ullrich
- Mordred Boulais
- Jeffrey Normile
- Kai'lani Woodard
- Katherine Burgess
- Kobe Coleman
- Kyrie Doniz
- Luke Lacaria
- Mai Nguyen Dac
- Ochirsaikhan Davaajambal
- Paige Downey
- Yanqiao Chen
- Favour Ojo