# AAM @ CNU Partnership Opportunities

3 October 2024

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School of Engineering and Computing\*

\* launch date: tomorrow

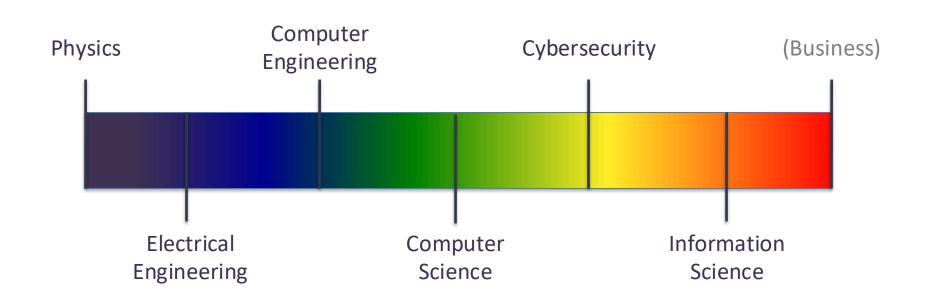


#### Christopher Newport University

- Primarily Undergraduate Institution
- Engineering and Computing embedded in the Liberal Arts
- Located 2.6 miles from here
- Beautiful campus, gorgeous buildings, wonderful people
- About 4,500 students (mostly undergrads, some grads)



## Engineering and Computing Disciplines



#### Our Students - Your Workforce

- Undergraduate degrees in each of the disciplines
- Graduate degree in Applied Physics and Computer Science
- Capstone projects with uncrewed systems (air, land, sea)
- Student UAS Competition Team













#### Faculty Research Areas

**Astrophysics** 

**Power & Control** 

Robotics & UAS

AI & ML

**Nuclear Physics** 

Communication & Systems

Software Engineering

Cybersecurity

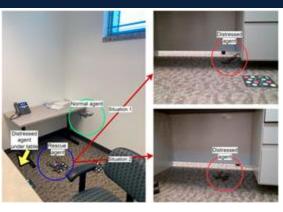
Big Data, Data Science, Modeling, Simulation, Optimization

#### AAM-Relevant Research





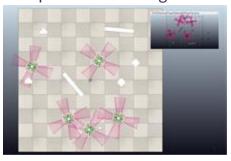
Operational Resiliency of UAV Swarms

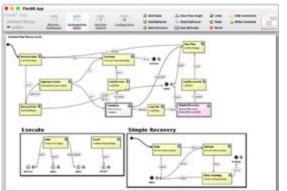


Autonomous navigation and obstacle avoidance

Simulation and Experimental Design







Robot behaviors Control and navigation Software development

#### Innovation Hub @ CNU

- NSF EPIIC grant Enabling Partnerships to Increase Capacity
- Connect faculty (and students) with regional industry and research partners
- Funding available for pilot projects in the areas of AI and Data Science

Web: <a href="mailto:cnu.edu/ihub">cnu.edu/ihub</a>

Email: riedl@cnu.edu



## Science and Engineering Research Center



## Makerspace and Machine Shop



#### Autonomous Systems & Drone Lab





#### Opportunities for Industry

- Research collaborations with faculty and students
- Joint grant proposals (CNU's PUI status can be helpful)
- Capstone projects in areas of shared interest
- ☐ Access to interns and new graduates (e.g., Pizza My Mind)

☐ Starting in Spring 2026: Spaces in new Engineering Research Center