CSC Industrial Advisory Council (IAC), Spring 2026 Meeting

Quick recap

The meeting was a yearly gathering of West Chester University's Computer Science Department alumni and faculty to discuss industry trends and department updates. Rich Burns, the outgoing chair, presented enrollment challenges showing a significant drop in first-year computer science students between 2024-2025, and discussed new initiatives including AI courses, cybersecurity certificates, and a capstone project program led by Linh Ngo that connects students with local clients. The group extensively discussed how AI is transforming the field, with alumni sharing insights about the need for software engineers who can work with AI tools while maintaining fundamental programming skills, the importance of teaching non-deterministic testing and governance, and the challenge of addressing student concerns about job placement in the current AI-focused job market. The discussion also honored the late Jim Fabrey, who founded this alumni council, and noted the upcoming leadership transition with Liu Cui taking over as department chair.

Next steps

- Liu Cui: Continue to monitor and follow up on the NSA CAE recertification decision, expected by the end of the month, and attend the CAE conference in Pittsburgh to explore project opportunities with other CAE schools.
- All participants: Share with Rich Burns any information or examples of other universities' approaches or initiatives related to computer science enrollment, curriculum, or AI integration, if encountered.

Summary

AI Integration in Education Updates

The meeting began with participants sharing updates on their current roles and recent experiences, particularly focusing on how AI integration is influencing their work and teaching. Rich Burns discussed his ongoing efforts to incorporate neural networks and large language models into an upper-level undergraduate course, highlighting the challenge of fitting these

topics into the curriculum. Art Freas emphasized the importance of systems engineering in AI development, suggesting that individuals with this background are better positioned for success in the field. The group also acknowledged the ongoing impact of AI on academia and discussed potential adjustments needed in response to these changes.

Computer Science Enrollment Challenges

The meeting featured introductions from several West Chester University computer science alumni, including Steve Flowers, Laura Zakowski, Stuart Claghorn, Art Freas, Dave Drager, and Andrew Schwabe. Rich Burns, the current chairperson, announced that his 6-year term as chair would end in 30 days, with Liu Cui set to take over as chair for a 3-year term. The main discussion centered on significant challenges in computer science enrollment, particularly a drastic drop in first-year cohorts between 2024 and 2025, with projections showing another slight decrease for the following year. This enrollment decline is expected to result in lower CS1 and CS2 section offerings, which could have downstream effects on upper-level classes in the coming years.

Computer Science Placement Concerns

The group discussed concerns about computer science career placement rates, with Art Freas citing Stanford's poor placement numbers of 18% for full-time positions in the industry. Rich Burns shared West Chester's self-reported data showing a dip in computer science placements, though not as severe as Stanford's numbers, and noted that students are increasingly concerned about entry-level job placement. Andrew Schwabe attributed the broader industry challenges to negative messaging from AI providers about cost-cutting, suggesting that the negative perception of junior developer roles is affecting student interest in computer science degrees, and proposed addressing this through strong counter-narratives and live presentations.

Academic Program Expansion Initiatives

Andrew Schwabe discussed the need to sell the value of academic programs to parents and emphasized the importance of creating a clear career path that differentiates programs in a rapidly changing industry. Rich Burns shared updates on new initiatives at West Chester, including a proposed AI course, a new software design patterns course, and new certificates in Practical Computer Security, Cloud Engineering, and Artificial Intelligence Engineering. The discussion also touched on expanding course offerings beyond computer science majors and introducing online modalities to reach a wider audience.

Computer Science Course Updates

The meeting focused on updates to computer science courses and accreditation. Linh Ngo presented changes to CSC 402 Software Engineering Capstone, which is now fully project-based with local clients, resulting in positive feedback and several students receiving job offers. The team discussed their ABET accreditation and NSA CAE recertification process for the CS major cybersecurity certificate, with a decision expected by the end of the month. The conversation ended with a discussion about how computer science education should evolve to address AI and modern programming practices, with Rich Burns questioning how to balance traditional programming fundamentals with emerging technologies.

AI Integration in Computer Science

The group discussed challenges and opportunities in computer science education, particularly regarding AI integration. Steve Flowers identified three key issues: the need for a re-education campaign about AI capabilities, opportunities for the department to expand AI teaching across the university, and integrating AI into software engineering processes. Art Freas emphasized that while AI tools will become more prevalent, human software engineers will still be essential, particularly in areas like security where manual oversight is crucial. Andrew Schwabe proposed an experiential learning approach where students first hand-code solutions, then use AI tools to recreate them, followed by discussions about governance and best practices, to help students understand both the power and limitations of AI technologies. The group also discussed how new graduates, having grown up with AI, will bring different skills and perspectives to computer science programs. Art Freas emphasized the need to ground these students while maintaining core curriculum elements like coding and multiple languages. Steve Flowers highlighted the importance of training students as software engineers rather than just coders, focusing on systems thinking and conceptualization. The discussion concluded with a proposal from Dave Drager to potentially split CS1 into separate AI and non-AI tracks to accommodate different student preferences, while Andrew Schwabe suggested raising entry-level expectations and providing balanced exposure to AI's capabilities and limitations.

AI Governance in Computer Science

The group discussed the importance of teaching non-deterministic testing and AI governance in computer science education. Andrew Schwabe emphasized the need for students to understand fuzzy logic, measure AI quality, and trace issues when models change. Art Freas highlighted the value of learning from poor code examples and stressed that AI practitioners should recognize AI's probabilistic nature. Rich Burns raised questions about integrating these concepts into

undergraduate computer science courses, noting that advanced topics like finite automata are typically introduced in later years.