



COMPUTER AND INFORMATION SCIENCE (CIS) PROGRAM
Employer Advisory Board (EAB)
Monday, May 20, 2023 | 6:00 - 7:30pm | Building/Room E-106

MINUTES

Introductions and Program Overview

1. Welcome by Career Education Program Manager, Charlene Alsbaugh
2. Advisory Board Member in attendance
 - I. Grabiél Elenes, Network administrator, City of El Cajon
 - II. John Gerstenberg, Senior Software Developer, City of Chula Vista & Adjunct Instructor, Cuyamaca College
 - III. Marqus Patton, Software Test Engineering & President, San Diego NSBE Professional Chapter
 - IV. Paul Vasquez, MBA, MCP, Director of IT, Senior Aerospace, Southern California
 - V. Chantel Mesta, Ph.D Student-MFT in Training, Program Manager, Workforce Development, Department of Labor/CAREERworks
 - VI. Mohammed Raof, Doctor of Philosophy in Information Systems & Technology
3. Cuyamaca College staff in attendance:
 - I. Annie Zuckerman, Faculty/Co-Chair of CIS Department, Cuyamaca College
 - II. Charlene Alsbaugh, Career Education Program Manager, Cuyamaca College
 - III. Malena Medrano, Job Placement Specialist, Cuyamaca College
 - IV. Monica Rosas, Employer Relations Liaison (ERL), Cuyamaca College

Industry Trends and Forecasting

Where do employers see the industry going?

M. Raof:

- Government jobs
- Microsoft products
- Health care industry privacy
- JAVA is everywhere
- A focus on AI

P. Vasquez:

- Usage of AI for the cybersecurity implementation
- Being able to program/having the skills
- Palo Alto is crucial
- Cloud solutions skills
- Front-end development
- AWS – Amazon more flexible for moved development and more affordable
- Azure – For enterprises, this is the platform being used. In enterprise everyone is migrating to AZURE and Microsoft

J. Gerstenberg:

- C# (“C sharp”) and custom .NET

G. Elenes:

- Use and manage of AI

P. Vasquez:

- Stated the importance of government regulations and compliance (GRC). The regulations to comply with will vary based on the specific industry in which the business operates. It may be beneficial for students to understand or at least know of the existence of these.
- They will learn *on the job* but it is always helpful to have the awareness. He gave examples of a few, for example at his organization, because they are an aerospace manufacturer they need to comply with CMCC:
 - [Code of Federal Regulations \(CFR\)](#) is a codification and FDA's legal authority to regulate both medical devices and electronic radiation-emitting products is the Federal Food Drug & Cosmetic Act (FD&C Act)
 - Cybersecurity Maturity Model Certification (CMMC) framework to ensure that companies operating within the defense sector have the necessary controls and measures in place to protect sensitive information. CMMC (Aerospace/Defense) starts in spring 2025 and it is a critical step for aerospace organizations seeking to work with the DoD
- Hire people to know the controls and regulations like NIST 800171 – national institute of measurement to follow the NIST

G. Elenes:

- His department services the El Cajon Police Department; they need to follow California Justice Information Services (CJIS) information system (police department system)
- If someone has exposure to the above regulations, the person will be more visible
- Knowing governance is useful

C. Alsbaugh: shared context around *K16 Collaborative Verified Programs* process and the fact that project management was a need for students to be considered for the internship program. She asked about the importance of having **Project Management** knowledge/experience?

- **G. Elenes:** Yes, Project Management is important and also being assertive is key, you have to take the reins and make sure to enforce the deadlines
 - **M. Patton:** shared about online tools to keep track of the progress like [GitHub](#) or [JIRA](#) is useful (*Jira is the #1 agile project management tool used by teams to plan, track, release and support world-class software with confidence*)

A. Zuckerman: asked how much weight does the Project Management certification have and is it honored and needed in industry? All: all agreed it is important

- **G. Elenes:** talked about the importance of PMI/PMP



C. Alsbaugh: what are the certifications that are necessary for students to have?

- **J. Gerstenberg:**
 - CCNA (Cisco Certified Network Associate),
 - CISCO,
 - Firewall/Palo Alto,
 - Amazon Cert/AWS,
 - AZURE/Microsoft

C. Alsbaugh recalled the conversation with Interim Department Chair A. Alam and Software Development was an agenda item

- **J. Gerstenberg:** he does some code, computer science, software engineering is more of a master's degree

C. Alsbaugh: posed the question to the group about what strategies to take to increase the Palo Alto enrollment?

- **J. Gerstenberg:** market the program because it's hard to find on the website
- **P. Vasquez:** reach out to Palo Alto. They can help market it and refer people to the Cuyamaca Course. He mentioned he is sending two Senior Aerospace employees to take this course

C. Alsbaugh: what would you like to see in a cloud tech course?

- **P. Vasquez & M. Patton:** AWS, AZURE, Google

C. Alsbaugh: will the above make the candidate more employable?

- **P. Vasquez:** Yes, and it will also depend of where you want to eventually work in
- **G. Elenes/J. Gerstenberg:** at the City of El Cajon and City of Chula Vista we do not need the above courses
- **J. Vasquez:** GCC HIGH is way more defense sector (Microsoft GCC High, is the cloud platform developed by Microsoft for cleared personnel and organizations supporting the Department of Defense.).

Roundtable

- **J. Vasquez:** shared he went to a conference recently and the labor market data showed there is a need for 800,000 people needed in the industry
- **G. Elenes:** IT techs need to pass background checks. Back ground checks are critical, if you are an IT administrator be a person with ethics
- **M. Patton:** Most likely, in SD and for DoD contractors or government agencies you will need security clearance
- **G. Elenes:** vital to note the importance of group projects, team projects
- **J. Vasquez:** how to manage the systems call it creating software or doing anything you need to know how to manage the systems you are creating "end point management"/system administrator
 - **M. Raouf:** that is sometimes embedded under risk management
- **G. Elenes:** understanding of ERP systems. In government, they utilize [Tyler Technologies](#). This technology is used in public sector
- **J. Vasquez:** Data based knowledge
- **J. Gerstenberg:** sequel service (data base management), *PostgreSQL: MongoDB: The Developer Data Platform | MongoDB mongo*, AWS databases
- **M. Raouf:** suggested to ask students about curriculum, to get perspective of students. Invite students to the advisories to get more buy-in



Networking

- **C. Mesta:** offered to work with Cuyamaca College JPCM M. Medrano on getting more students to enroll in their free [CAREERworks programs](#)
- **M. Rosas:** introduce C. Mesta to contact J. Bares at Women in Cyber Chapter San Diego
- **M. Patton:** invited C. Mesta to speak at the July NSBE SD meeting. Mr. Y. Dapaa is the chair elect
- **M. Patton:** is interested in [NSBE](#) SD starting Community College chapters, starting with Cuyamaca. There used to be a student chapter before. He will share with M. Rosas historical data of the Cuyamaca NSBE Student Chapter