CUYAMACA · COLLEGE ·

Computer and Information Science Employer Advisory Board Meeting Minutes

Monday, May 1, 2023, I 6:00 - 7:30pm I Room E-205

A. Introductions and Program Overview

- Welcome - Cuyamaca Career Education and CIS Program Coordinator
- Board Member Introductions
  - ✓ Charlene Alsbaugh, Cuyamaca College Career Education
  - ✓ Linda Carver, Cuyamaca College - CIS Department
  - ✓ Karen Castro, ESET North America
  - ✓ Jennifer Cheung, Women in Cyber San Diego Chapter and NIWC Pacific
  - ✓ Sheryll Del Rosario, Women in Cyber San Diego Chapter and SDSU
  - ✓ Sara Diaz, City of El Cajon
  - ✓ John Gerstenberg, City of Chula Vista and Cuyamaca College
  - ✓ Lena Heckbert, Cuyamaca College Career Center
  - ✓ Taylor Lemker, Cuyamaca College Career Education
  - ✓ Marqus Patton, San Diego NSBE Professional Chapter
  - ✓ Tim Phillips, Cuyamaca College - CIS Department
  - ✓ David Raney, Cuyamaca College - CIS Department
  - ✓ Monica Rosas, Cuyamaca College Career Education
  - ✓ Jaime Sanchez, San Diego County Credit Union and Cuyamaca College - CIS Department
  - ✓ Curtis Sharon, Chair of Department of CIS Program
  - ✓ Myron Soyangco, Sharp HealthCare - Sharp Grossmont Hospital
  - ✓ Paul Vasquez, Senior Aerospace
  - ✓ Annie Zuckerman, Cuyamaca College - CIS Department
- CIS Program Overview
- Introduced a new course: 'The internet of things.'

B. Industry Roundtable

1. **Industry Trends and Forecasting**
   i. Where do employers see the industry going?
   ii. Cloud security, AWS (certificate), Azure.
   iii. How to work between cloud and network or 'hybrid.'
      1. Federating, *a data federation is a software process that allows multiple databases to function as one. This virtual database takes data from a range of sources and converts them all to a common model. This provides a single source of data for front-end applications*.

2. Networking as the fundamentals of the industry.

3. 'The best students come from Cuyamaca' – they learn skills vs philosophy.

iv. Are there **existing** or anticipated employment gaps?

v. System Skills

vi. Some students are unaware of DNS and/or VPN.

vii. Prioritization of tickets, customer service (Help desk etiquette.)

viii. Development and operations – understanding how to set up a test environment.

ix. Secure coding.

x. Governance, risk and compliance (state and federal levels.)

xi. EMR-specific certifications (Epics) are going to blow up in the next 10 years due to San Diego's healthcare marketing.

1. *Epic is a popular electronic health record (EHR) software that is used by healthcare providers around the world. Epic certification is a credential that validates an individual's knowledge and proficiency in using the Epic EHR system.*

xii. SE Linux (Security Enhanced Linux.) Programming considering that folks have differing levels of security clearance.

xiii. Endpoint management (multiple computers) I.e., VMware workspace.

1. Folks tend to get into the industry and then learn this knowledge.

xiv. Other Skills

xv. Report writing (Cisco)

xvi. Project management

2. **Employer Needs and Industry Preparation**

i. What are the best entry points (roles) for students wanting to break into the industry?

ii. What is the best way for a brand-new student to break into the industry? I.e., first-time professionals or career changers.

iii. Mandatory semester-long internships.

1. Navy has annual internship opportunity (high school + college.)

2. NSBE connects students with internships nationally.

a. Usually have application cycles a year ahead of time.

b. Often look for Juniors/seniors.

c. The city of El Cajon is launching a program for IT folks – also mentioned one with the sheriff's department.

    d. Help Desk opportunities with John Gerstenberg (City of Chula Vista and Cuyamaca)

  iv. Portfolios (creating a website outlining your projects.)

    1. I.e., Git Hub.

    2. Showing your own web development skills (website) to host examples.

  v. Capstone projects leveraging industry partnerships.

    1. Concluding with a presentation/demo to industry (Communicating your work is incredibly important.)

    2. Look for CSR/Outreach/Paid volunteer opportunities for employees (I.e., Booz Allen) to judge projects.

  vi. Professional organizations – some are open to students.

    1. Curtis wanted to create an assignment requiring students to attend one professional org meeting per semester.

    2. These organizations also offer their own workshops (NBSE partnered with USD chapter to do resume review with QUALCOMM hiring managers.)

    3. Professional orgs partner with industry to provide meeting space, food, etc. **Great idea for our students.**

  vii. What knowledge, skills and abilities (KSAs) do students need to be equipped with for success?

  viii. Interns: Problem solvers, cross-functional projects / adaptability, customer service, communication.

  ix. Leverage your background and transferrable skills to pivot into the field.

  x. **Good entry point:** Help Desk / customer service. "We are in a customer service industry."

3. **Career Outlook**

  i. What is the career outlook for students with AA degrees in San Diego?

  ii. What are the most relevant professional certifications available?

  iii. Certifications: CompTIA Security + (unanimously the most relevant by EAB), Cloud Security, SOX controls.

  iv. Badging: posting to LinkedIn (I.e., World of Haiku)

    1. Digital badging is truly relevant.

  v. Curtis had the idea of showing students what different certificates exist across different industries. Students may not know where exactly they want to go, but we can show them what they will need.

C. Curriculum Updates and Discussion
1. Program Certificates:
    i. <u>Network and Security Certificate</u>
        1. Should we separate Enterprise Networking and Security into individual certificates?
        2. Yes!
        3. Great idea to subsidize certificate test costs/make the cert test the class final exam.
        4. Inviting the Workforce Partnership to the class to promote their program – CyberHire – that students will need to apply for.
            a. Covers cost for CompTIA A+, Network + and Security +
    ii. <u>Enterprise and Networking Certificate</u>
    iii. <u>Web Development Certificate</u>
    iv. <u>Cloud Technologies Certificate</u> *(future offering, potential AS degree)*
        1. Is this a relevant content area to build into a certificate?
        2. What could this curriculum look like?
2. Request for industry partnership for future curriculum development.
    i. Our team will follow up for partnership opportunities.
3. Any tools/software we should ensure our students are exposed to?
    i. MS 365 Windows Management, Giro, Git, SharePoint (Intranets.)

D. Wrap-Up and Next Steps
1. Action items, future meeting cadence, and date/time for next meeting.

Advisory Board Members (Not in attendance)

Jesse Eguia Spectrum Enterprise