COLLEGE of **SAN MATEO**

Computer and Information Science

CIS Advisory Board Meeting
Thursday, October 22, 2015

Advisory Committee Members Present:

First	Last	Employer / Job Description
Michael	Dickson	Visa
Moshe	Gotesman	Google, Inc.
Stormy	Maddux	San Mateo County
Stephen	Pieraldi	Sideband Networks, UC Berkeley
Cory	Putnam	Intuit, Inc. DevOps Engineer
Tom	Ryan	Okta

Ex-Officio Members and Guests Present:

First	Last	Employer / Job Description
Kathy	Ross	CSM Dean Business and Technology
Stacey	Grasso	CSM CIS Faculty
Melissa	Green	CSM CIS Faculty
Martha	Tilmann	CSM CIS Faculty
Stanley	Isaacs	CSM CIS Faculty
Mounjed	Moussalem	CSM CIS Faculty
David	Chin	CSM CIS Instructional Aide II

BEGIN NOTES: "CIS ADVISORY BOARD 2015"

Advisory Committee Meeting

Building 10, Room 401

October 22, 2015

5:30 – 7:00 PM

Welcome

What are employers looking for as far as skills? Using Burning Glass software, job descriptions were scraped from websites. There is an incredible rise in demand for Java and another big rise in C++. There has also been an uptick on Ruby on Rails. There may probably be department level discussions about shifting emphasis to match courses offered to job demand.

Topics for discussion

I. Cyber Security and Plans for the Future (Kathleen Ross)

The department has been intending to get into area for some time, but there have been issues finding someone to come to education to provide leadership of where to focus and how to start. The topic will be pushed off until a person can be found. The department is interviewing for adjuncts, but there is a resource drought.

Google may have university cooperation programs that can be utilized (possibly volunteers from Google to teach classes).

CSM has done some preliminary research on what is being taught in Cyber Security at other colleges that would teach at our level. A lot of what CSM does is professional certificates, which is what returning students want as an added tool for their resumes. CSM will continue to search for leadership to determine what the right courses to teach are and course design. The field is large, so there will probably be multiple professional certificates in this area.

"The bigger problem is making sure you pick the right things that aren't going to be disposable too quickly."

What do entry positions need? They need foundation, operating systems, networking, tools, analytical background, and knowledge of anti-malware. Vocational class teaching how to manage the tools used in the industry would be an asset. A mention of using free Open Source tools to learn the basic skills used in commercial tools was made.

The switch in the market place philosophy is going towards "destroy as fast as you can internally and obscure as much as you can permanently."

II.   Web and Mobile Application Development (Melissa Green)

Approved to offer degree as of Fall 2015. CIS 137 (iOS Swift programming) offered as alternative to Android programming for degree.

Discussion of CIS 420 (Project Management Professional Certificate Preparation). Course may not be germane to industry in context of this degree. Coursework including Agile and Scrum was suggested.

Introductions

III.   Data Science [Big Data] Curriculum (Melissa Green)

Developing a mini-certificate for Data Science. Certificate kept smaller to avoid the longer approval process. Requires two new courses: NoSQL Databases and R Programming. A suggestion was made to add Google's MapReduce to the curriculum, or to the data warehousing course. R is used by data scientists for modeling. R is a good tool for the analytical side. MapReduce is used to convert the data to something consumable. There is an option to create stackable certificates while waiting for approval on a degree.

IV.   DevOps

Discussion points:

- Maybe something other than a full Java course. Definitely JavaScript, Python, and Bash Scripting.
- Application monitoring.
- Tools: New Relic, Jenkins, Chef, Jira, others.
- RPM in Linux.
- Developers should also be testing: Test cases, test builds, test-driven methodologies.
- Team projects are difficult in a semester framework.

V.   Open Discussion

Cut due to lack of time.

--- END NOTES ---