CIS/CSC/CAT Advisory Committee Meeting Minutes

Meeting Date and Time: 5-20-2022 10am

Meeting Location: Zoom

Attendees (Name and Title): Caleb Neal, Systems Administrator/ Tier 3 Support

Innfinity Software, (Property management Software. Primary focus is hotels booking software, but they do remote software accommodations now such as for mining camps and other remote locations)

- 1. Welcome and Introductions
- 2. Industry Update and Emerging Trends (general discussion on their perspective)
 - a. How has the pandemic impacted your business/industry?
 - i. Oil and gas industry seems to be more important so making sure people are vaccinated and having documentation backed up became more important so business has increased in this area.
 - ii. They were remote before the pandemic so it that did not affect things.
 - iii. Airport check-in kiosks became a bigger part of their company (replacing employees with automation)
- 3. How important are certifications vs degrees in your company? (What do you look for when hiring entry level positions, specific recommendations for gaining entry level positions)
 - a. In his field if you can do the work and prove you can do it, you can get a job.
- 4. Does your company offer internship opportunities to college students? (if not, would your company be interested in something like this?)
 - a. No, his company does not.
- 5. What technical/ computer science skills are most in demand at your company?
 - a. Database management, SQL, anything in the Microsoft Stack, DevOps,
 Database management, syncing databases over long geographical distances.
- 6. Review Curriculum (solicit input and request approval)
 - a. Python Programming Certificate and AS Degree
 - i. Knowing Python can be beneficial. It's a good entry-level language. However, it would not apply to them specifically.
 - b. Data Science Certificate and AS Degree

i. This would be useful. Especially any sort of graphing. His company does have an interest in Data Science.

CIS/CSC/CAT Advisory Committee Meeting Minutes

Meeting Date and Time: 5-27-2022 5pm

Meeting Location: Zoom

Attendees (Name and Title): Evan Kuryllo, Software Engineer, Broken Circle Studios

- 1. Welcome and Introductions
- 2. Industry Update and Emerging Trends (general discussion on their perspective)
 - a. How has the pandemic impacted your business/industry?
 - i. We were hybrid remote/ in-person before the pandemic. Since the pandemic we have primarily moved to primarily remote.
- 3. How important are certifications vs degrees in your company? (What do you look for when hiring entry level positions, specific recommendations for gaining entry level positions)
 - a. Certifications and degrees are important, but the most important thing is experience and ability.
- 4. Does your company offer internship opportunities to college students? (if not, would your company be interested in something like this?)
 - a. Not currently
- 5. What technical/ computer science skills are most in demand at your company?
 - a. C#, C++, Git, Perforce, NodeJS, SQL, Software Architecture, Unity
- 6. Review Curriculum (solicit input and request approval)
 - a. Python Programming Certificate and AS Degree
 - Knowing Python can be a bonus. Our company does not currently use much Python. The program looks like it provides a solid foundation in Python.
 - b. Data Science Certificate and AS Degree
 - i. This isn't particularly applicable to individuals in my particular area of expertise. However a lot of data science is used for analyzing mobile game performance and this seems applicable in the game industry as a whole.

CIS/CSC/CAT Advisory Committee Meeting Minutes

Meeting Date and Time: 5-6-2022 4pm

Meeting Location: Zoom

Attendees (Name and Title): Ken Muckey, PMP Enterprise Implementation Project

Manager

Accredited by Google For Data Analysis

LBM Data Science Certified

Company: Toshiba America Business Solutions

They are a business to business part of Toshiba and they are Enterprise level, covering the entire United States. They also work with international clients.

- 1. Welcome and Introductions
- 2. Industry Update and Emerging Trends (general discussion on their perspective)
 - From my industry the trend would be for business processes to go towards automation and start having more tools and automated work flows due to the shortage of skilled labor
 - b. How has the pandemic impacted your business/industry?
 - i. The largest issue we've had with the pandemic in the last few years was supply chain. We have had to set expectations with clients and teams as well as doing some manufacturing in house. Skilled labor has been hard to find and hard to keep.
- How important are certifications vs degrees in your company? (What do you look for when hiring entry level positions, specific recommendations for gaining entry level positions)
 - a. A four-year degree is the minimum for employment. It is taken as evidence that a person can take on a challenge and succeed. Certifications are helpful and can be a bonus for getting hired. PMP is definitely valued but no other certifications are specifically required or sought out.

- b. On a technical side they are mostly looking at CS or CIS for degrees. Also Biochemistry, Electrical Engineering, Mechanical Engineering, anything STEM.
- 4. Does your company offer internship opportunities to college students? (if not, would your company be interested in something like this?)
 - a. The company does not and is not designed to offer internships.
- 5. What technical/ computer science skills are most in demand at your company?
 - a. Excel formulas and spreadsheets, the ability to do very light programming in Visual Basic or Python. For larger project they use Sequel, Jupiter, Database software like Oracle.
 - b. Data visualization and dashboard development.
 - c. For Spreadsheets they use both Google suite and Microsoft. Google sheets and Google docs are used for collaboration with outside partners.
 - d. Excel is used internally and externally and use it to build out data sets and perform data analysis.
- 6. Review Curriculum (solicit input and request approval)
 - a. Python Programming Certificate and AS Degree
 - i. Skilled professionals with python programming experience would be useful for their company.
 - b. Data Science Certificate and AS Degree
 - i. Skilled professionals with data science experience would be useful for their company.
 - ii. They would want someone who could build out spreadsheets in CSB and utilize that data. They also need Python programmers specifically since one of their major products is in automation reordering. Python is utilized in internal tools as well as client facing tools
 - c. Normally they only hire 4-year degrees, but especially right now, they would consider anyone with an Associates and applicable qualifications. This is a new change based on issues finding skilled labor.

CIS/CSC/CAT Advisory Committee Meeting Minutes

Meeting Date and Time: May 11, 2022, 4:20pm

Meeting Location: Zoom

Attendees (Name and Title): Minh Phan, Principal Engineer, Observability at Twilio

- 1. Welcome and Introductions
- 2. Industry Update and Emerging Trends (general discussion on their perspective)
 - i. His company lost a lot of people due to poaching. It is a job-seekers market. If you are not happy with your company, and you have expereince, you can leave and easily get another job with higher pay.
 - ii. Some large companies are increasing base pay. Large companies typically have base pay "bands" so if you live in San Francisco you would make 25% more than if you live in Las Vegas. However, companies are changing this now. They are also offering bonuses, such as shares that vest immediately, mental heath perks. Companies are offering less inoffice perks and more perks that benefit a remote workforce.
 - iii. In terms of retention, he has lost a lot of teammates. If your manager doesn't give you what you want- you leave. It turns out everyone wants to work at home.
 - b. How has the pandemic impacted your business/industry?
 - i. His company went full remote and is officially remote-first. Companies that insist on return to office creates issues with COVID cases spiking.
- How important are certifications vs degrees in your company? (what do you look for when hiring entry level positions, specific recommendations for gaining entry level positions)
 - a. A college degree is preferred but not required if you can demonstrate you have the ability to learn on the fly and are motivated. With entry-level positions, they are seeing if applicants at least have an idea of what the company does and can demonstrate the ability to learn quickly. Entry level is more personality based than skill based. If you can learn quickly and admit if you made mistakes, then that is good.
 - b. Recently his team hired two entry-level positions; they were hungry, humble, and they showed an affinity to learn on their feet.
 - c. If the pool of applicants is too big, then a 4-year degree can give you an edge.

- d. You need to show in the 5 seconds recruiters are looking at you that you are worth hiring.
- e. Job postings may require a 4-year, but this is not a hard requirement as long as you can demonstrate you are as good as a 4-year or better.
- 4. Does your company offer internship opportunities to college students? (if not, would your company be interested in something like this?)
 - a. His company offers internships
 - b. They take on college students
 - c. This is usually done in December/January, but they do have new graduate hiring coming up.
- 5. What technical/ computer science skills are most in demand at your company?
 - a. Moving to cloud
 - i. AWS is best. If you know AWS, you have an edge.
 - ii. Containers, Kubernetes
 - 1. (Depending on who you talk to) they roll their own clusters
 - 2. Everything is in data centers
 - iii. They are on the tail end of the DevOps. You have to plan, write the code, deploy the code, and make sure it works
 - iv. SRE basics would give you an advantage
 - v. They try to avoid vendor lock-in.
- 6. Review Curriculum (solicit input and request approval)
 - a. Python Programming Certificate and AS Degree
 - i. For his department and team. This would be useful. Python and Networking would be useful.
 - ii. Courses "C" and "D" in the certificate would not be particularly useful
 - iii. If someone came to them with that certificate, he would not hold a lot of weight to it, but he would look more to their personal projects.
 - 1. More advanced computer science courses would be useful- Data structures etc.
 - iv. Courses "A" "B" and "E" would be useful
 - v. Cybersecurity would be good if ethics was taught in it- why would you do the things you do- why would it be wrong or right.
 - 1. He thinks one of the things lacking in the industry is ethics.
 - 2. Since the industry is pretty accepting of non 4-year degrees (smaller companies)
 - a. You may be developing something important, so ethics could be important.
 - b. Data Science Certificate and AS Degree
 - i. One of the things missing might be learning "R"
 - 1. This is used in parts of the industry

CIS/CSC/CAT Advisory Committee Meeting Minutes

Meeting Date and Time: May 6, 2022, 4:30pm

Meeting Location: Zoom

Attendees (Name and Title): Patrick Stanley, Research Manager- Data Science Innovation

Child Care Resource Center in Chatsworth California

- 1. Welcome and Introductions
- 2. Industry Update and Emerging Trends (general discussion on their perspective)
 - i. In the last few years, the amount of tools that people will use and that people come to interviews with experience with have exploded. These are often the same, or very similar, but this has caused a decay in candidates who know SQL. Python is still used a lot, but SQL is used less which makes it more difficult to decide on what tool to use for the company.
 - ii. Technology-wise Python is still utilized for a lot. Tableau, Power VI, Click (although this is used less), but they are pricey and restrictive. Looking for other tools to come out that are better.
 - iii. A lot of developers have been utilizing a more agile design, since the pandemic, things like jotform. Many platforms are being launched in the last two years.
 - b. How has the pandemic impacted your business/industry?
 - i. As the person who is always fighting for innovation, the pandemic lit so many fires and opened up demand and trust in data science. They were able to turn projects around much more quickly than before because the higher-ups were forced to trust.
- How important are certifications vs degrees in your company? (what do you look for when hiring entry level positions, specific recommendations for gaining entry level positions)
 - a. When hiring, his company wants a 4-year degree for advanced positions in the data science side. His company wants a 4-year degree for technical positions since they think a 4-year degree is evidence of a higher level of critical thinking. However, a 2-year degree with a bunch of certifications can get hired. Certifications are considered a bonus in hiring. They consider certifications that

- come from schools/ Universities/ in-person training better than certifications that come from other online programs.
- b. Someone with a 4-year degree with a additional certification or an AS in data science would be desirable to hire. A data science certification is a good bonus.
- 4. Does your company offer internship opportunities to college students? (if not, would your company be interested in something like this?)
 - a. Some divisions do. The research division is looking into starting something up, but it is a time-cost for management.
 - i. The company is looking into internship positions to help provide paths for training and eventual hiring.
 - ii. Since they are a research division, it can be hard to get applicants that have knowledge in research methodology and data science.
- 5. What technical/ computer science skills are most in demand at your company?
 - a. Python
 - b. SQL
 - c. Data Science Software training or experience in data curation or a data massaging tool
 - d. Statistical analysis (general understanding)
- 6. Review Curriculum (solicit input and request approval)
 - a. Python Programming Certificate and AS Degree
 - i. This would be useful for his company.
 - 1. Trying to find a solid Python certification is hard.
 - 2. His company typically looks for a 4-year degree.
 - 3. His company would like resources that they can send people to, to get the training.
 - b. Data Science Certificate and AS Degree
 - i. This would be useful for his company.
 - 1. His company typically looks for a 4-year degree.
 - 2. This would be a good bonus skillset.
 - 3. His company would like resources that they can send people to, to get the training.