IN THIS ISSUE...

Profile: Public Safety

Profile: Kevin Partridge

App Case Study: Marc Jacoby

Training: Summer Activities

Tech Trivia: Win a Prize!

Summer 2015

INFORMATION SERVICES

Academic Administrative Network/Phone

TECH NOTES

Information Services: Contact Information
Profile: Public Safety

With close to 18,000 students and employees on campus, keeping a safe learning and working environment is no easy task. Technology plays a large part in assisting the WCU Department of Public Safety (DPS) to run smoothly. The university’s security infrastructure is valued at approximately 4 million dollars and consists of over 800 cameras and 419 card reader access devices located across campus, a CODY Record Management System, and an external emergency alert system.

The CODY Record Management System is a premier record management system specifically used by police departments. James Kalavik, who is a special investigator, is CODY certified. He maintains the system and is responsible for training the DPS personnel. The purpose of the system is to record and time-stamp all calls when they are received. The officer responding to the call uses the system to record all relevant information about the call/incident. With all this data stored in one central location the DPS can create various customized reports. By analyzing the data that CODY generates the DPS can create a Hazard Vulnerability Analysis. This report can present trends on the following data:

- Demographic
- Geographic
- Approximate dollar value loss

The outcome of these reports helps the DPS redistribute its resources to where they are most needed. For example, if repeat occurrences are happening in or near Brandywine Hall, then the work force is refocused to that area; this is the true value of the system.

On-line forms have been and continue to be a great asset in incident reporting. When a form is submitted, the administrator immediately receives an alert. This enables the administrator to begin work on the complaint immediately. These on-line forms are:

- Confidential Report form: this is used by an individual to report a crime such as an assault, mugging, etc.
- Sexual Misconduct: this is used to report a sexual assault or any incident that is construed as a sexual misconduct.

WCU is at the forefront with respect to using technology for compliance with the Clery Law and Title IX of the Education Amendments of 1972. The department provides online training for all CSA mandated employees.

The External Notification System, which has been in place since 2010, consists of loud speakers, placed strategically across campus. These loud speakers are used to broadcast the event of an emergency. In addition to the outdoor broadcast system, WCU has an Emergency Communications System in place that sends out text messages, emails, and notifications on the WCU homepage and digital signage displays. These communication tools are used to alert and deliver information about the emergency to the student body and all employees. All elements of the system are tested quarterly.

Keeping the WCU campus safe and secure is a great task, but with the help of technology the DPS is doing an outstanding job in making it so. Many thanks to Mike Bicking, Chief of WCU Police, and John Dispaldo, Emergency Management & Electronic Security Manager, for this interview.
Q: Tell me about your background.
A: I first started at WCU working as an intern at the Student Help Desk. While there, I had a variety of job responsibilities including but not limited to answering tier 1 help desk calls, evaluating new technology and working to image and maintain the ACC Student Computer Labs. From there, I quickly moved to working with the Web Team and then interning full time as a Network Administrator in the Networking and Telecommunications Department. Next, I accepted a full time position with the university as a Network Administrator and was eventually promoted to the position of Systems Engineer in 2009. I received my degree from WCU in Computer Science with an emphasis and certificate in Computer Security. I left the university in 2011 for an opportunity to work for Comcast and returned in the fall of 2013 in the position of Sr. Systems Engineer.

Q: How did you become interested in technology?
A: I became fascinated with technology at a really young age. I remember when I was about 6 years old my father came home from work one day with a 9600 baud modem and computer which he needed to connect together in order to access a mainframe at work. This sparked a major interest for me in computers and I was determined to figure out how it worked. As my knowledge progressed, I became the “go to guy” at home and with family and friends for everything technology related. In high school, I did consulting for a couple of K-8 schools helping them set up their networks and computer systems.

Q: Tell me about some recent projects you have been working on at the university.
A: We recently completed a total revamp of the server network. Historically, the server network was tightly coupled with the desktop network. The two were very dependent on each other and shared much of the same infrastructure components. This approach worked well for many years. However, as the University’s network began to grow and became more critical for everyday business and educational operations, so did the network. Architectural changes were needed for a number of reasons, including but (not limited to) capacity and performance. Our team completely redesigned the server network, which involved separating it from the desktop network. This required completely dedicated and independent network infrastructure. Both networks now have their own core routers, switches, firewalls, etc... With this project, we also redesigned how we provision servers and route data between the various server networks. We worked on this project in Spring 2014 through the end of the Summer 2014.

Q: What are some projects currently underway?
A: We are currently working on a major fiber upgrade project across North Campus, converting it from a multi-mode to single mode fiber backbone. Connecting the buildings on campus using single...
mode fiber will allow us to provide higher data rates and redundant connectivity via diverse fiber pathways to a number of different routing locations across campus. This project has involved choosing fiber pathways and pulling new fiber through the University’s existing manhole system. With single mode fiber, we will be able to bring 10 Gbps (gigabits = billion bits) of data connectivity to almost every academic and residential building on campus. This will also allow us to eventually bring connectivity up to as high as 40 Gbps or even 100 Gbps. Currently, the multi-mode fiber restricts us to 100Mbps or 1Gbps depending on the distance from point A to point B. We also cannot connect buildings to diverse network routing locations due to distance limitations inherently present with using multi-mode fiber. When this project is completed, the end users should see a considerable increase in network speed and reliability.

**Q:** What do you enjoy the most about working at WCU?

**A:** First of all, I have to say how much knowledge I have gained from Richard Chan’s mentoring. Richard took me under his wing as an intern and shared much of University’s network history. This has been a critical component in our group’s future planning from a technology prospective. I thrive on the collaborative atmosphere present in the Networking and Telecommunication Department. We are continually brainstorming since our work is very project and team oriented. Over the years, we have continued to raise the bar; you have to keep raising the bar if your goal in education is excellence. You have to envision where you think the technology is headed and then determine what infrastructure needs to be in place to support it. This is what I love about working at the University; we set a goal and we achieve it with success.

**Q:** What are you looking forward to in the future?

**A:** The birth of my daughter! **Editor’s note:** After this interview, Madison Kathleen Partridge arrived June 4 (8 lbs. 5 oz.) – see above!

**A:** I am committed to seeing West Chester University continue to raise the bar and be successful. My job satisfaction comes from success – successful implementations, successful upgrades, success for the Information Services Division and the University as a whole. I am excited to be here!
App Case Study: iOS App Development

iOS App Development

By Marc Jacoby

In keeping with the mission of the university’s School of Music and my interest in the intersection of music education and technology, much of my research centers around app development for music education applications. Working with WCU alumnus Craig Gonci, we created a web site called TheMusicInteractive.com to distribute our apps and games. Most were created using Flash or Director, both Adobe products, and designed for use on an interactive whiteboard. It’s been very gratifying to see our apps being used in music classrooms all over the world.

Recently, with the increasing popularity of mobile devices, I have begun the process of rebuilding apps to run on the iOS and Android mobile platforms. The process is a bit convoluted and not always as fully featured as the original app running on Windows or MacOS. This is especially true when using MIDI, a technology that is used to reproduce musical performances. MIDI is the modern version of the player piano roll but obviously with much more capability in editing, etc. with sounds synthesized by the computer. With MIDI, new performances can be created on the fly, based off user input, instead of using pre-recorded fixed tracks.

For iOS development, the only way to incorporate MIDI into my mobile apps is to use Apple’s development software, Xcode, which until recently had a very steep learning curve for programming in Objective C, the language used. Last year Apple released a new programing language called Swift that seems significantly easier to understand and learn. Still, programing apps to use MIDI is not as well documented as other more common aspects of app development and I’ve struggled to get over this hurdle.

Fortunately, I have a current WCU student playing in the Criterions Jazz Ensemble who also happens to be a computer science major (as well as drum major for the Golden Rams Marching Band). Joe Cosentino has been helping me to learn this critical component and, with the help of William McGrory from Information Services, we have a computer in the CVPA Music Education Lab running Xcode and two iPads used for testing purposes. With a set of tools that can be used in future projects, I hope to release an open source academic version for others to use as well as present this project at upcoming music technology and education conferences.
Training: Summer Activities

5 Reasons to Attend Software Application Training this summer......

1. Choose from a variety of sessions and technology tools
2. Learn new strategies and new tools.
3. Leave with ideas for active learning, to streamline class management tasks and to collect data.
4. Take some time to learn something new
5. Get inspired as you plan for the new term

Check out these great opportunities:

- D2L Boot Camps and workshops
- D2L Boot Camp
- Refresher Week
- Digital Corner Events
- Digital Corner Summer Workshops
- Open House
- Digital Corner Demo Series
- PeopleSoft Training
- Refresher Week
- And more!

For more information or to Register:
- Software Application Training
- SAT Registration
- D2L
- Digital Corner

Follow us: @WCUDigitalC, @D2LWestChester
Tech Trivia:

Sponsored by the Student Services Inc (SSI)

The winner will be chosen at random from those submitting all correct answers to Dr. Fabrey at jfabrey@wcupa.edu within 48 hours of the appearance of this issue of Tech Notes. Prize will be determined and awarded by SSI.

For this issue, different technology strategies will be required to find answers that are NOT technological in nature. For example, try looking up related sites and/or using quotes around several words to make sure that they appear next to each other. Try using our Library Digital Archives.

1. Philips Memorial Hall was named after George M. Philips, but he was NOT the first president of our institution. Who was, and when did he begin?

2. Our current West Chester football team has had many years of excellence. What was the last year that we had a perfect record, including post-season, and who was the coach?

3. There have been many new buildings at WCU in recent years, with the new CBPA Center now under construction. Which of our buildings was the last to be completed in the 19th century, and in what year?

Answers to the Tech Notes Winter 2015 contest: 1. The forerunner of NASA was NACA (National Committee on Aeronautics was created in 1915 and replaced in 1958; 2. Winsor McCay produced a short animation of the sinking of the Lusitania in 1915 and is often credited with being the father of animation; 3. For the first time in history, a wireless (radio) phone message was sent across the Atlantic Ocean from Arlington, Virginia to Paris, France on October 21, 1915. Winner: Bruce Norris!!!
## Contact Information

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Help Desk</td>
<td>x3350</td>
<td>21 Anderson</td>
</tr>
<tr>
<td>(Faculty/Staff/Student)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">wcupa.edu/ithelpdesk</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone Repair</td>
<td>x3535</td>
<td>002 Basement, 121</td>
</tr>
<tr>
<td><a href="#">wcupa.edu/infoservices/commservices</a></td>
<td></td>
<td>Allegheny Hall</td>
</tr>
<tr>
<td>Desire2Learn (D2L)</td>
<td>x3350</td>
<td>02 Anderson</td>
</tr>
<tr>
<td><a href="#">wcupa.edu/d2l</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ResNet Central</td>
<td>x2660</td>
<td>003 Ground Floor,</td>
</tr>
<tr>
<td><a href="#">wcupa.edu/infoservices/resnet</a></td>
<td></td>
<td>Brandywine Hall</td>
</tr>
<tr>
<td>Software Application Training</td>
<td>x3191</td>
<td>24 Anderson</td>
</tr>
<tr>
<td><a href="#">satregistration@wcupa.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web Services</td>
<td>x0043</td>
<td>03 Anderson</td>
</tr>
<tr>
<td><a href="#">wcupa.edu/infoservices/webinfo</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## VICE PRESIDENT’S OFFICE

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Phone Number</th>
<th>Office Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director</td>
<td>JT Singh</td>
<td>x2828</td>
<td>023 Anderson</td>
</tr>
<tr>
<td></td>
<td>Donna Beckett</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Assistant</td>
<td>James Fabrey</td>
<td>x3228</td>
<td>150 25UNA</td>
</tr>
</tbody>
</table>

## DIVISION CONTACTS

<table>
<thead>
<tr>
<th>Division</th>
<th>Name</th>
<th>Phone Number</th>
<th>Office Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Services</td>
<td>Paul Gargiulo</td>
<td>x3397</td>
<td>020 Anderson</td>
</tr>
<tr>
<td>Tech Services</td>
<td>Teresa Hudson</td>
<td>x4135</td>
<td>020 Anderson</td>
</tr>
<tr>
<td>Web Services</td>
<td>Kim Slattery</td>
<td>x0043</td>
<td>005 Anderson</td>
</tr>
<tr>
<td>Administrative Computing</td>
<td>Pat Lenzi</td>
<td>x1048</td>
<td>017 Allegheny</td>
</tr>
<tr>
<td>Telecom/Infrastructure</td>
<td>Joseph Sincavage</td>
<td>x3535</td>
<td>003 Allegheny</td>
</tr>
<tr>
<td>ResNet</td>
<td>Richard Chan</td>
<td>x1061</td>
<td>004 Allegheny</td>
</tr>
</tbody>
</table>