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INTERNSHIPS AT WVNET -- JUST LOOK AT US NOW!

For the first time in over two decades, WVNET is training the next generation of IT professionals. This summer, WVNET has four interns working in various positions. Staff members at WVNET poured through hundreds of resumes and met with dozens of students in order to select this summer's team of interns which subsequently yielded a large number of exceptionally bright and skilled applicants. From an organizational viewpoint, interns bring WVNET a fresh and innovative perspective. These attributes are particularly valuable in the area that Josh Friend and Justin Robinson will be working which is that of web design and development. As Mike Karolchik, WVNET's Web Developer states, "Interns bring up to be find the best path that takes us these



Mary Stewart, Josh Friend, Justin Robinson, Aaron Daniels

them where we want to go and they find the best path that takes us there. Working with them is a learning experience in both directions and a chance to explore the newest technologies."

Josh is a senior at WVU who is majoring in communications and is working as a Web Designer. He has a gift for aesthetics which he has learned to apply to the online world. Before coming to WVNET, he designed and created a number of digital graphics and websites for local organizations.

Justin is a May 2012 graduate of WVU with a Bachelor of Science in Computer Engineering with minors in computer science and communication studies. While completing his studies, he made the most of his spare time by completing internships at Mylan, NASA, and Threewide which provided him with a strong skill set compared to other new graduates. When asked to comment about his new role at WVNET, Justin stated, "I am very excited to be a part of the team here at WVNET. I am sure, working with Mike and Josh, we will accomplish great things."

Aaron Daniels will be working with the WVNET systems' team. Aaron is scheduled to graduate from WVU with a Bachelor of Science degree in Computer Science. In addition, he holds a B.S. in Psychology from High Point University and brings a varied and unique skill set which includes grant writing and work in human services. As part of his senior project, Aaron created games that will empower therapists to treat neurological injuries. *Continued below...*

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Internships at WVNET — Just Look at Us Now! Continued...Dr. Mary Stewart will assist WVNET's ventures into online course development. Mary has an undergraduate degree in Secondary Education from Fairmont State University, Masters Degrees in English and Community and Agency Counseling from WVU, and a doctorate from Indiana University of Pennsylvania in Literature and Criticism. She is currently pursuing post-doctoral work in higher education leadership at WVU. Mary has over 20 years of teaching experience, dozens of successful grant applications, multiple publications, and an array of conference presentations. In her spare time, she volunteers as an advocate for community arts' organizations with the intent of preserving Appalachian culture by helping those organizations plan events to showcase talented West Virginia artists, musicians, and performers. When asked about her thoughts on the internship, Mary stated, "I am delighted to join the WVNET staff, and I am particularly excited to work with Dr. Roxann Humbert again. She has been a driving force in the development of online learning in WV. Her expertise is astonishing."

In summary, WVNET's Director of Human Resources Bob Roberts comments "I am absolutely thrilled with the quality of the individuals who are participating in our internship program. Each of our interns is astronomically more skilled than I had hoped for. We are truly fortunate to have recruited such a strong caliber of individuals."

Pittsburgh Supercomputing Center Upgrades Bandwidth and Connectivity in West Virginia (reprinted by permission of author)

PSC COLLABORATION WITH WVU, WVNET AND FEDERAL RESEARCH FACILITIES TRANSFORMS WEST VIRGINIA NETWORK LANDSCAPE.

PITTSBURGH, June 5, 2012 — The <u>Three Rivers Optical Exchange</u> (3ROX), the high-performance Internet hub operated and managed by the Pittsburgh Supercomputing Center (PSC), has significantly upgraded the link between PSC and <u>West Virginia University</u> (WVU). At the same time, <u>WWNET (West Virginia Network)</u>, a network organization that serves schools, government and non-profits in West Virginia, has joined 3ROX, which gives West Virginia clients of WWNET a significant bandwidth upgrade as well as access to expanded research and education resources.

The new 3ROX link to WVU increases bandwidth 64-fold—from 155 megabits per second (Mbps) to 10 gibabits per second (Gbps). "This is a big step forward for research and education connectivity to WVU," says Wendy Huntoon, PSC director of networking. The upgrade enhances support for cleanenergy related research at the National Energy Technology Laboratory (NETL), a U.S. Department of Energy national laboratory with campuses in Morgantown and Pittsburgh. NETL researchers use the 3ROX link to access supercomputing resources at PSC.

By joining as a participant in 3ROX, WVNET upgrades connectivity from West Virginia K-20 schools to research and education networks such as Internet2 — from eight 155 Mbps links (aggregating to about five Gbps) to two 10 Gbps connections (one from Morgantown and another from Huntington). Among other education and government facilities, the upgraded WVNET bandwidth will link the National Radio Astronomy Observatory. (NRAO) facility in Greenbank, West Virginia, with WVU and the WVU Astrophysics program. From WVU, the 3ROX/WVU high-bandwidth link will then connect NRAO Greenbank with the global astronomy community.

More important to WVNET than the improved bandwidth per se, says Dan O'Hanlon, director of WVNET, is the collaboration with 3ROX. "We've wanted to become more involved in the educational community," says O'Hanlon, "and participating in 3ROX meets our goals. It's a big gain for West Virginia that we're now able to collaborate with people who are involved in supercomputing and have world-class experience in running a research and education network."

The catalyst for the collaboration and the upgrades, says Huntoon, was the 10 Gbps connection that 3ROX provided last year for the National Oceanic and Atmospheric Administration (NOAA) Environmental Security Computing Center in Fairmont, West Virginia. "The NOAA grant was stimulus funding," says Huntoon, "and because we had infrastructure in place, we've been able to provide these expanded services very competitively from a cost perspective. We formed an effective partnership with WVNET, WVU, NETL and NOAA and these upgrades — to a total of 40 Gbps within a year — transform the West Virginia Internet landscape."

WEST VIRGINIA INTERNET2 SEGP

The National Science Foundation awarded Marshall University, on behalf of the West Virginia Higher Education Policy Commission, a federal grant in 2010 to enhance cyberinfrastructure and to enable inter-campus Internet2® access. In April of 2011, the West Virginia Internet2 Consortium for Sponsored Education Group Participants (SEGP), Marshall University, OARnet (The Ohio Academic and Research network, Columbus), and Internet2 signed an agreement that allowed West Virginia to be the 40th state to offer Internet2 memberships to eligible organizations through a shared mem-



Dr. Jan Fox

bership. Under this agreement, Marshall University was acting as the sponsor and sole SEGP connector and OARnet as the Internet2 connector, reports Dr. Jan Fox, Senior VP for IT/CIO, Marshall University (photo inset above) and Dr. Arnold Miller, Assistant VP, Information Technology, Marshall University (photo inset below left). Delivery of this service was facilitated by WVNET to its member institutions which included higher education institutions, K-12, libraries, state and local government, medical facilities, research facilities and others that meet the requirements of the Internet2. In May of 2012, this agreement was modified in response to network enhancement initiatives at WVNET to add WVNET as an additional SEGP connector, and 3ROX/Drexel (3 Rivers Optical Exchange, Pittsburgh) to be an additional Internet2 connector, thus enhancing access and reliability to those same participants.



Dr. Arnold Miller

Providing Internet2 as a SEGP service combines the efforts of colleges and universities with a K20 initiative which will enable advanced technologies to be used in transformative ways, resulting in the development and use of advanced network applications, tools, services and content to enhance teaching and learning and in other ways that further the mission of elementary, secondary and postsecondary education in West Virginia. The West Virginia research community wants to bring interested K12, community colleges, colleges, libraries and museums to the table as early as possible to find ways to share

ideas, results, technology and other information. Ideas would first be shared on the closed Internet2 high bandwidth network to ensure a testing arena for ideas and applications and later deployed to the commodity Internet. This will provide a better mechanism of enabling not just the research, technology and clinical communities, but also education, education research, arts and cultural communities to engage the opportunities of the new technologies. This could provide research specialists at major research institutions with a method to truly collaborate with our faculty and students. These enhanced capabilities will have particular significance not only for expanding science, technology, engineering and mathematics programs, research initiatives and clinical outreach, but will also bring significant economic development opportunities to the region.



The **W**est **V**irginia **S**tatewide **T**echnology **C**onference 2012 Program Committee reports registration for the *FREE* virtual conference on August 8-9 has officially opened. The Program Committee is thrilled to announce a one hour live webcast with *blogger, speaker and consultant on educational technology Steve Hargadon. Steve is the Director of the Web 2.0 labs, host of the Future of Education interview series, chair of the Social Learning Summit, and co-chair of the annual Global Education and Library 2.0 worldwide conferences. We are pleased and excited to have him as one of two guest speakers. More information about the WVSTC 2012 will follow. In the meantime, you may register for the conference here: http://conference.wvnet.edu*



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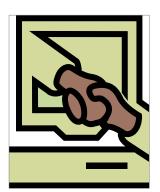


Fran Barnes

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www.wvnet.edu

We're on the Web!



Reaching out —-24/7/365



participated in the West Virginia Higher Education CFO/CPO Spring Conference

http://cfocpo.wvnet.edu at Flatwoods on May 24-25. The Argos reporting solution was demonstrated for attendees.

Sample reports shown generated a lot of excitement among the financial officers, and requests for Argos accounts from several institutions were received following the conference. WVNET hopes to have the hosting fees for Argos finalized in the next few weeks. We are excited to be able to deploy such a useful product to our customers.

Work continues on the *deployment of the new IBM Power 770 server*.

Designed to consolidate business-critical workloads in a virtualized environment, this server provides significant efficiencies through continuous, dynamic resource adjustments that optimize performance while minimizing energy usage. The 770 will be taking on the workload of two other Power Series servers, one of which will be retired. The remaining P-570 will be used as a disaster recovery environment for production Oracle databases and other applications and will eventually be moved to another location. All of the hosted Banner databases will benefit from the increased performance of this new server complex.

DegreeWorks Training Session 2 is being held the week of June 11 at Bridgemont Community and Technical College and the week of June 25 at West Virginia Northern Community College.

Blackboard: WVNET is working to finalize the move of Fairmont State University's Vista system to be located at WVNET later this year and planning is underway for increased capacity for the Blackboard Learn 9.1 environment to welcome additional institutions to hosting their Learn 9.1 learning management system environments at WVNET.



On a More Personal Note...



WVNET Staff members were delighted to see former Director Johnnie Byrd and his wife Carolyn

on June 5 when they were passing through Morgantown and visited WVNET. Johnnie was the WVNET Director from 1986-1989. Many staff members that were under his "watch" (Johnnie was a retired Army Colonel) are still with WVNET and remember the Byrd's fondly. We hope to see them again soon!!

Here's a big **HAPPY BIRTHDAY** to the following staff members with birthdays in June: **Steve White**.