UNDERGRAD RESEARCH LEADS TO JOB

Undergraduate research paid off in a big way for May 2016 University of North Alabama graduate Vincent “Chuck” Chiriaco. His SHA-1 Collision Attacks with Parallel Computation presentation at a national conference led to a job offer from a software development company.

If you ever met Chuck or saw him give a presentation, you know what a dynamic personality he is. “I was presenting solo at NCUR [National Conferences on Undergraduate Research], and one of the spectators was a project manager for a local company looking to expand their workforce. He enjoyed my presentation, and gave me his card. The following week, he found me on LinkedIn and offered an interview,” said Chiriaco. “The workforce came to me, I guess you could say.”

Chuck is now a Software Engineer at Software Application Workshop (SAW) in Asheville, North Carolina. He said his tasks vary from hour to hour, and include anything from designing a new feature, “bug” squashing, and reviewing or producing code.

As an undergraduate Chiriaco wasn’t enthusiastic about research initially, but grew to be excited about it. “Honestly, research just seemed like ‘one more thing I have to do.’ But I was required to do it for the Honors

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Research is one key to predicting success in graduate school

By Larry Bates, Ph.D., Professor of Psychology

If I’m a graduate professor trying to choose my incoming class, I want to pick those few students who have the highest probability of success. As a graduate professor I know that the student will need to be intelligent in order to pass the courses, and I can get a pretty good idea of how smart they are by looking at their GPA and looking at other tests scores (like GRE, MCAT, LSAT, MAT, etc.) But the other thing I know is that students at many, perhaps most, graduate programs will have to complete a thesis.

So as I go through this hypothetical pile of applications for graduate school, I’ll sort them into two piles: smart enough versus maybe not smart enough. Then I’ll look at each of the “smart pile” applications to see if they have research experience and how much. More pile sorting...good research experience versus maybe not enough research

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‘Women in STEM at UNA’ seeks members

Men have traditionally dominated the fields of STEM—Science, Technology, Engineering, and Mathematics. One budding campus organization hopes to change that gender imbalance by supporting women in those disciplines.

“Women in STEM” is the newest organization on campus seeking RSO (Recognized Student Organization) status, and founder Falon Yates hopes to recruit interested students this semester.

“There’s this concept of ‘leaks in the STEM pipeline,’” said Falon, referring to the loss of women and minorities from STEM over the course of their education and careers. “I wanted to start an organization that would act as a support network for underrepresented groups in STEM and help prevent that attrition.”

Falon, a sophomore majoring in biology with a minor in psychology, said that the idea is to connect UNA STEM students with one another and also to create a chain of mentorship, connecting students with professionals already working in STEM fields.

“My hope is that building a sense of community and mutual empowerment will help keep students invested in STEM and encourage them to stick with it,” she said. “I think E.O. Wilson’s words from the prologue to Letters to a Young Scientist are especially apt for women and minorities in STEM: ‘I urge you to stay on the path you’ve chosen, and to travel on it as far as you can. The world needs you—badly.’”

Falon said that even though the name of the organization is Women in Stem, they need students of all genders and backgrounds to be involved.

“Minorities are also vastly underrepresented in STEM, which is why one of the first people I talked to about the idea for this group was Joan Williams, director of the Office of Diversity and Institutional Equity. Ms. Williams and Dean Carmen Burkhalter [College of Arts and Sciences] have been incredibly supportive from the beginning.”

Dr. Melissa Driskell, assistant professor of Earth Science, is the faculty advisor for the group.

The group needs a charter membership of at least 10 full-time students with the grade point average of 2.0 or better to become an official RSO. “Students who don’t meet those criteria are also welcome—and you don’t have to be majoring in a STEM subject or planning to go into one of those fields to join. Anyone who’s interested in supporting women in STEM is welcome, and it’s important to me that our charter membership is diverse and representative of the entire UNA community,” said Falon.

Interested students may e-mail Falon at flyates@una.edu, message them on Twitter @UNAWomenInSTEM, or visit the group’s Facebook page at www.facebook.com/UNAWomenInSTEM/.

2015 Grant Recipients: Final Reports due soon

Final reports are due for undergraduate research projects that were funded in whole or in part by the QEP office. September 30 is the deadline to submit reports. The new grant cycle will begin October 1; an announcement will be sent out regarding proposals.
Research leads to job
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Program, so I embraced it to get it done, and it certainly paid off. I loved working with the Computer Science faculty,” he said.

Chuck praised UNA faculty for their guidance. “My faculty kept pushing me when I had very little reason to want to move on. They were very encouraging in anything that would benefit me as a student and were very patient with the learning process.” He mentioned computer science instructors Dr. James Jerkins, Dr. Janet Jenkins, Dr. Jason Watson, and Dr. David Nickels, as well as his professors in the math department, as being especially helpful.

Dr. Lisa Keys-Mathews, director of the university’s Quality Enhancement Program, said, “This is a perfect example of the benefit of the undergraduate research experience. The knowledge and skills gained by students in undergraduate research will enhance their career opportunities.

“Chuck is one of several students who credit their job and graduate school opportunities to their undergraduate research. UNA faculty mentors are to be commended for the work they do inside and outside the classroom, but especially related to undergraduate research.”

The Quality Enhancement Plan is now in its fifth year at UNA. QEP—Building Success Through Discovery—focuses on engaging students in undergraduate research, defined as the specific reading, data and information collection, analysis, and presentation skills (written or oral) required to successfully participate in problem solving within any given discipline and career.

Chuck, a Gadsden native who graduated from Southside High School, said that he would encourage students to develop strong communication skills.

“A student’s best leg up is strong communication skills,” he said. “They need to command presence when stepping into a room. My presentation did not necessarily provide bleeding edge results, but it did leave a strong memorable impression on my audience, thus leading to a job offer. If a student can move beyond a screen for true communication, their head will tower above their peers for success.”

He also encourages students to join the Honors Program. “It will drive you to settle for nothing but the best,” he said.

Grad school advantage
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experience. Then I’ll read the letters of recommendation of the “research students” to see how they did with their research experience and look for evidence of all of those intangible skills. Part of being a good undergraduate student is preparing for the next door to be open to you. Research experience is so very crucial for entry into most graduate programs.

QEP Data urgently needed!

Sincere thanks go to the faculty who provide data in support of the Quality Enhancement Plan—please submit your latest data to qep@una.edu as soon as possible if you have not already done so.
Announcing UNA’s first interdisciplinary, undergraduate, peer-reviewed journal!

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