

Department of

# COMPUTER SCIENCE

alumni newsletter

[cs.ndsu.edu](http://cs.ndsu.edu)

**NDSU** NORTH DAKOTA  
STATE UNIVERSITY

Fall 2015

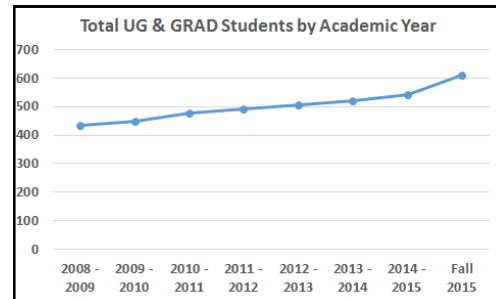
## THOUGHTS FROM THE HEAD



Dr. Brian M. Slator,  
Department Head

First, a correction. I thought our enrollment might be going flat, but I was wrong. Here is the verified data. If anything the curve is getting a little steeper, meaning the department is getting even more popular.

Academic Year	Total Under Grad & Grad Students
2008 - 2009	435
2009 - 2010	450
2010 - 2011	477
2011 - 2012	493
2012 - 2013	505
2013 - 2014	522
2014 - 2015	543
Fall 2015	609



We have crafted a new relationship with the Development Foundation, largely through the positive influence of Monique Anderson, the College development officer, and we are entering anew era of scholarship giving. There are more details at <http://cs.ndsu.edu/scholarships/> but the basics are as follows:

Joan Krush (department advisor) and I have developed a 'uniform' scholarship application form.

This academic year we will accept applications from students in November, 2015, and select recipients in December, for scholarships awarded in January of 2016 for the 2015-2016 academic year. Then in April, 2016, we will accept another round of applications, and will make selections in May, for scholarships awarded for the 2016-2017 academic year. Thereafter we will accept applications every April for scholarships awarded the following Fall semester.

The scholarships we propose to offer annually are these:

1. Rahul Award will be around \$350+ — for graduate students, preference to those who have published or presented a paper at a conference
2. Paul Juell Scholarship will be around \$1,000 — GPA of 3.0, preference to ACM members
3. Ken Nygard Scholarship is \$500 — GPA of 3.4, at least 4 CS courses
4. Bruce Erickson Scholarship \$500 — GPA of 3.5 preferred, at least 24 credits in CS
5. CS Department 1-2 awards \$1000 — GPA of 3.5 preferred, at least 24 credits in CS
6. Microsoft 1-5 \$1,000 awards, GPA of 3.5 preferred, renewable

Which reminds me. Please donate to one of our scholarship funds. Or, if you'd rather, consider creating your own scholarship. This can be accomplished for as little as a \$10,000 endowment (a tax deductible charitable donation), which will finance a \$500/year award (approximately), that you can name after yourself or a loved one, or anyone/anything you wish. Also, in case it matters to you, you can specify the conditions of the award: left-handed, poodle owning, chess masters or long-haired freaky people, or whatever (within reason). You can choose.

Which reminds me. I had a friend in graduate school who thought there should be a scholarship for the "most efficient" student. This is the student who passes every class, but with the least effort and by the barest of margins.

Efficiency is very important in Computer Science, so you can see the logic. You can probably guess my friend in graduate school was exactly that student, scraping by in class but otherwise enjoying life. Some of you reading this knew "that guy", or you WERE "that guy". It's a good idea for a scholarship, you think? Contact me, [brian.slator@ndsu.edu](mailto:brian.slator@ndsu.edu) or [monique.anderson@ndsu.edu](mailto:monique.anderson@ndsu.edu) if any of these ideas work for you.

## ALUMNI NEWS



Paulette F. Armstrong, MS '86, computer science, was awarded the College of Science & Mathematics *Distinguished Alumni Award*

and attended a departmental lunch in her honor November 12. She spoke to students in CS469, CS366 and CS413 combined, and CS741 to share her career experiences with NDSU computer science students and faculty. The presentation gave the audience an insight into the career opportunities available for computer science students in the defense industry by relaying her own history and identifying existing industry roles for computer science students.

Following her graduation, Armstrong, was hired by E-Systems, a company in Texas, to develop performance simulations during the software design phase. E-Systems was later bought by Raytheon Company, a technology and innovation leader specializing in defense, security and civil markets throughout the world. Throughout her career at Raytheon, she was a systems engineer, systems engineering manager, integrated product team lead and program manager. Later this winter, she will retire as the senior system engineering manager. She has received the prestigious Raytheon Leadership Award.

### Nygaard Scholarship Recipient

Angela Alean was the 2015 recipient of the newly-established Nygaard Scholarship in Computer Science. Gloria and Ken Nygaard, Computer Science professor, established the Nygaard Scholarship Endowment fund in 2014. An award will be made each year, to a student who is an undergraduate



Pictured are Gloria Nygaard, Angela Alean, and Ken Nygaard

majoring in Computer Science who is achieving academically and has completed at least four Computer Science courses that count toward a Computer Science major.



Matt Berseth, a 2005 graduate with an M.S. in Software Engineering, started NLP Logix with two colleagues. NLP Logix is an advanced analytics and machine learning data product and services company.

Matt says, "I started the company with two colleagues who worked with me at a medical services company developing and applying predictive models and advanced analytics into its workflows. Instead of using SAS, SPSS or some other machine learning tool, we developed our own, called LogixStudio, which allows us, and our customers, to develop, deploy and monitor the predictive models."

Matt and his wife, Katie, live in Jacksonville, Florida with their three children.



Ganesh Bell is Chief Digital Officer for GE Power and Water, headquartered in San Mateo. He is responsible for the digital solutions to drive business growth at GE. He finished his M.S. in Computer Science in 1995.

Watch an informative interview with him about the direction of GE at

<http://video.foxbusiness.com/v/4244487203001/ge-breezing-into-digital-/?#sp=show-clips>

### Microsoft Scholarship Recipients

NDSU Computer Science named five students as recipients of \$1,000 Microsoft Undergraduate Scholarships this year. These students were recognized at the College of Science and Mathematics Honors Day campus ceremony on April 17th.

They are:

Alex Job  
Madeline Gordon  
Mi Huynh  
Samuel Mayer  
Nicholas Meske

Our sincere thanks to Microsoft for their generosity!



Pictured are Nicholas Meske, Angela Alean (Nygaard Scholarship) and Brian Slator, Computer Science Head

# Student News

## NDSU ACM takes first place at HackISU



Jeff Goetze (left) and Kyle Ryan win 1st place for software 'hacks.'

The NDSU ACM piloted a trip to HackISU, at Iowa State University, to determine if it's a candidate for future travel competitions.

The event was a 36 hour hackathon (an event where people who are excited about programming come together and collaborate to build cool things) which required that participants come up with an idea for a hardware or software hack, develop that idea and build it within 36 hours. After which point, the products were judged by several businesses.

Jordan Goetze and Kyle Ryan took first place with a project that performed live sentiment analysis on twitter messages and plotted them in one minute slices of time, on a map of North America to allow live sentiment tracking of topics by region. The competition was deemed good and ACM will be bringing more people to future hackathons. The next is in March 2016.

## NDSU ACM students took second and third place at MechMania

NDSU ACM students took second and third place at the 21st annual MechMania competition at the University of Illinois Urbana-Champaign. The competition ranks 'cyberwarriors' by pitting them against each other in simulated cyber-warfare environments. Teams of up to four students have 24 hours to build, test, and deploy an AI strategy to compete against other teams AI's in a network security challenge. MechMania is a great experience for freshman and sophomore students as it builds interest in computing and provides experience in solving problems under stress and deadlines. This years winning solutions relied on early fast expansion combined with good defense.

2nd place:

Nick Hilger  
Haiming Lou  
Kyle Merfeld

3rd Place:

Matthew Fevold      Kyle Ryan  
Jordan Goetze  
Ian Leith

*Do you have news to share? We want to hear from you so we can put it in our newsletter.*

*Send your story to [newsletter@cs.ndsu.edu](mailto:newsletter@cs.ndsu.edu).*

## 2015 Donors

Many thanks to the following alumni for their generous donations to the computer science department. It's encouraging as well as appreciated to see alumni who want to help students attain their goals.

Beth Delaney

Joseph Latimer

Information on how to donate to the CS department or the scholarship funds is online at

George Hamer

Donald Morton

[https://www.ndsu.edu/cs/support\\_the\\_cs\\_department/](https://www.ndsu.edu/cs/support_the_cs_department/)

Christopher Hetzler

Kevin & Karina Olson

Kevin Krueger

Igor Tatarinov

David Wenberg

## DEPARTMENT NEWS



Kenneth Magel, Professor, received the College of Science and Mathematics award for Excellence in Service. The service award is not given annually; rather, awarded only when there is evidence of exceptional service to the department, the College of Science and Mathematics, and/or North Dakota State University.



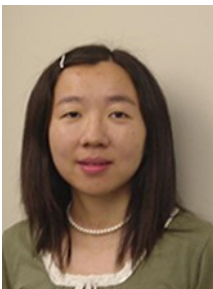
Joan Krush has been awarded the Outstanding Advising Award — Primary Advising Role category by the National Academic Advising Association.



Gursimran Walia, Associate Professor, was awarded the College of Science and Mathematics Excellence in Teaching Award



Simone Ludwig, associate professor, was elected to the NDSU Faculty Awards Committee.



Wei Jin, Associate Professor, received a five-year Faculty Early Career Development Award from the National Science Foundation.



Mark Pavicic has returned to the computer science department as Professor of Practice. Pavicic will be teaching CsCi 313 Software Development using games as the vehicle and CsCi 845 Formal Methods for Software Development. He taught in the department from 1987-1998.



Saeed Salem, Associate Professor, was elected to the Faculty Senate for 2015-16.

## PROFESSORS ATTAIN TENURE

Congratulations to the following professors who have obtained tenure:

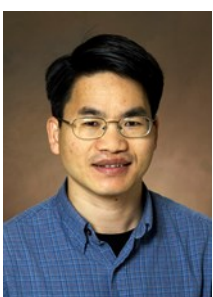
Wei Jin

Simone Ludwig

Saeed Salem

Gursimran Walia

Jin, Ludwig and Walia were promoted to Associate Professor; Ludwig already is an Associate Professor.



Changhui Yan, Associate Professor, is on the 2015-16 College Promotion, Tenure and Evaluation Committee.