from former CSE department chairs, deans of Engineering, and others whose work was impacted by Kevin’s service. An especially moving letter from McCloskey Dean of Engineering Emeritus Frank Incropera included the following passage:

Since the late 1980s, I’ve harbored the notion that the future of all engineering disciplines will be driven strongly by information technologies and that CSE and EE represented the tip of the spear. I am ever more confident in that vision and couldn’t be more pleased with what you’ve done to elevate the stature of the department, not only within the college but nationally and internationally. You’ve exceeded my every expectation.

Alumni and friends receiving this newsletter whose studies or professional choices were influenced by Professor Bowyer’s guidance and advice are invited to send their own notes of thanks and congratulations directly to Dr. Bowyer at kwb@nd.edu.

New CSE department chair Patrick Flynn is the Duda Family Professor of Engineering and has been a member of the Notre Dame faculty since 2001. He, Professor Bowyer, and Professor Walter Scheirer lead the Computer Vision Research Laboratory, a research team with broad activities in image based biometrics, digital forensics, digital humanities, and applications of imaging and identity sciences in various domains. Professor Flynn is an IEEE Fellow, an IAPR Fellow, and a Distinguished Scientist of ACM. Alumni and friends of CSE are welcome to correspond with Professor Flynn by emailing flynn@nd.edu.
13 Students Receive Doctoral Degrees

The Department’s graduate program was also productive this past year, with the following thirteen students earning their Ph.D. degrees:

- Michael McRoskey
- Christopher Mahn
- Madeleine Gent
- Mathew Matta
- Ryan McGrail
- Patrick Schurr
- Charles Shinaver
- Anthony Shivers
- Claire Sullivan
- Kathleen Quinn
- Kevin Riehm
- John Rocha
- Mathew Paulson
- Nicholas Ward
- Nancy McNamara
- Kelsey Meranda
- Steven Mike
- Patrick Drumm
- Garrett Duffy
- Jacob Cunningham
- Kurt Davis
- Breanna Devore-McDonald
- Jorge Beecham
- Ryan Busk
- Alexander Cao
- Andrew Caron
- Celeste Castillo
- Timothy Chang
- Vanice Cheung
- Samuel Cho
- Whitney Cho
- Mary Connelly
- John Considine
- Andrew Crawford
- Sara Cunningham
- Kurt Davis
- Breanna Devore-McDonald
- Jorge Diaz-Oritz
- Paul Dowling
- Patrick Drumm
- Garrett Duffy
- Jacob Dumford
- Daniel Finnegan
- Kimberly Marie Forbes
- Shawn Feltsch
- Robert Freedy
- Jessica Frin
- Luke Garrison
- Madeline Gent
- Andrew Gnoth
- Benjamin Gunnings
- Brittney Harrington
- Nicholas Haydel
- Daniel Heese
- Michael Hillmer
- Ryan Hooley
- Joshua Houseman
- Michael Hutchinson
- Cory Jbara
- Shaquille Johnson
- Victoria Johnston
- Nicholas Jones
- Jacob Kassman
- Benjamin Kennel
- Keith Kinnard
- Nicholas Kirkpatrick
- John Klammer
- Nathan Kowalewski
- George Krug
- Kathryn Kuenster
- So Yong Kwon
- Morris LaGrand
- Harrison Le
- Isaiah LeBlanc
- David Lewis
- Nicholas Lombardo
- Andrew Lubera
- Christopher Mahn
- Man Mann
- Michael Martinez
- David Matta
- Ryan McGrail
- Anna McMahon
- Ryan McMullen
- Nancy McMamara
- Kelsey Meranda
- Steven Mike
- Patrick Myron
- Anthony Marin
- Madelyn Nelson
- Gregory Nemeczek
- Mathew Paulson
- Nicholas Pellegrino
- Matthew Perez
- Kathleen Quinn
- Kevin Riehm
- John Riordan
- John Rocha
- Jared Rodgers
- Joseph Saeger
- Tylen Sommons
- Patrick Schur
- Charles Shinaver
- Anthony Shivers
- Claire Sonderman
- Matthew Staffellbach
- Philip Stenger
- Christine Stitches
- Jose Suarez Martinez
- Nicholas Swift
- Christopher Syers
- Rosalyn Tan
- Kristopher Thienemman
- Mitchell Troy
- Lucas Unruh
- Elizabeth Vista
- Dina Yu
- Alan Yuong
- Maxwell Welch
- Xiayan Wang
- Nicholas Ward
- Mary Kathryn Williams
- Jenna Wilson
- and Joseph Yoon.

Undergraduate Minor in CS + Design Launched

A new minor is now available to Computer Science and Engineering students interested in combining their computing skills with design thinking. The minor is called the “Collaborative Innovation Minor” and includes courses offered in the College of Arts, History, and Design. The first course in the minor is offered in Fall 2017 and is titled “Design Matters: Introduction to Design Thinking.” It is followed by three courses in various design areas and the minor is capped off with the Senior Capstone course, “Collaborative Design Development.”

Weninger Selected to ACM’s Future of Computing Academy

Professor Tim Weninger has been selected as a member of the Association for Computing Machinery’s inaugural Future of Computing Academy. Professor Weninger and 14 colleagues from around the world are tasked with guiding the ACM in serving the next generation of computer scientists. Professor Weninger’s research interests include data mining, network science, and social media analytics.

Chiang Receives Awards from Google and Amazon

Professor David Chiang received awards from both Google and Amazon to support the research of three PhD students in the fields of deep learning and natural language processing. Both of Chiang’s projects funded by the awards apply neural networks (deep learning) to human language. The project funded by Google is entitled “Neural Pushdown and Tree-Stack Automata.” It will develop new models for learning the syntax of natural language, drawing on ideas from formal language theory and parsing theory. The project funded by Amazon is entitled “New Directions for Whole-Sentence Training of Neural Translation Models” and will investigate better ways for neural networks to learn how to translate human languages, drawing on Chiang’s previous work in statistical machine translation.

EPICS Students Featured in COE Article

Engineering Projects in Community Service (EPICS) students Madeleine Gent, majoring in computer science and psychology, mechanical engineering students Kevin Dougherty and Michael Sisson, computer science students Quang Do and Alii Kwon and Joseph Yoon; along with advisor Paul Brenner, associate director of high-performance computing in the Center for Research Computing and research assistant professor in the Department of Computer Science and Engineering are featured in College of Engineering article detailing their project that modifies a child’s car to help with physical therapy.

Chi Senior Michael McRoskey Wins First Place in Photo Contest

Michael McRoskey, who visited the Ritsona refugee camp in Greece with fellow Notre Dame students, Soren Kyhjl and Nick Courtney, won first place in the Notre Dame International photo contest. McRoskey’s photo depicts Kyhjl just after giving a “piggy-back” ride to one of the children in the camp.

Bui Wins Frank O’Malley Teaching Award

The Notre Dame Student Senate voted on the 20 nominees for the Frank O’Malley Teaching Awards, ultimately choosing Dr. Peter Bui. Assistant Teaching Professor in CSE, as the 2017 Outstanding Teacher of the Year.

Professor Kevin Bowyer received the inaugural IEEE Biometrics Council Meritorious Service Award to honor outstanding service in the field of biometrics. The award was presented at the IEEE International Conference on Identity, Security and Behavior Analysis 2017 (ISBA-2017) held in New Delhi, India in February. The award is made each year to a person who has been active in the fields of interest to the Biometrics Council for more than fifteen years. Professor Bowyer was a founder of the Biometrics Theory Applications and Systems conference series and the inaugural Editor-In-Chief of the IEEE Biometrics Compendium.

Flynn Directs Notre Dame California and Brings Ten Members of CSE Class of 2018 to Palo Alto for the Spring Semester

Notre Dame California is a two-year-old activity devoted to strengthening all aspects of the connection between Notre Dame and California. CSE professor Patrick Flynn was Notre Dame’s California interim director in 2016-2017 and lived in Palo Alto during the academic year. During his time in Silicon Valley, Flynn oversaw the University’s establishment (through the generosity of AATI) of a Notre Dame facility in downtown Palo Alto, worked with the university’s research teams to create new opportunities for collaborations with California companies and schools, and met many prospective students, alumni, and friends of Notre Dame. He also organized and offered Notre Dame’s first Silicon Valley Semester, an off-campus study and work opportunity operates with cooperation from the CSE Department. Ten members of the CSE class of 2018 spent their spring semesters living, taking a full load of classes, and working at internships in the Valley. The students and their internship sponsors were Conrad Bailey (Kyndl), Marco Bruscia (OpsPanda), Nicholas Carroll (AT&T), Borah Chong (Kyndl), Luke Duane (OpsPanda), Dylan Greene (QuakeFinder/Stellar Solutions), Rocio Herring (Kyndl), Madeline Kusters (Intuit), Paul Lee (Kyndl), and Andrew Munch (Stryker). The SVS experience will continue in 2018 with a new cohort of CSE majors, and will hopefully enlarge to include more Notre Dame programs in future years.

3 Years Receive Doctoral Degrees
The Department's graduate program was also productive this past year, with the fall quarter enrolling thirteen students entering their Ph.D. degrees: Phbel Roch, Jian Xu Chen, Dipawipata Dasgupta, Yuanlan Dong, Fazle Faisal, Yi Gu, Yurit Halevoly, Tamer Levinboim, Haiyan Meng, R.J. Nowling, Indranil Palit, Vipin Vijayan, and Joseph Yoon.

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Lee (Kyndi), and Andrew Munch (Streker). The SVS experience will continue in 2018 with a new cohort of CSE majors, and will hopefully enlarge to include more Notre Dame programs in future years.

Striegel and Collaborators Secure $9 Million Research Award from IRAP
Under the direction of ND CSE Professor Aaron Striegel, Nitesh Chawla, and Dong Wang, the University of Notre Dame has been awarded $9 million from the Intelligence Community Research and Development Projects Agency (IRAP). The research will involve advances in data fusion from wearables, smartphones, and social media to better understand performance in cognitively demanding workplaces. The work will involve instrumenting 750 working professionals over an entire year to create a landmark dataset for studying the myriad of factors that impact workplace performance.

Weninger receives CAREER award, ARO YIP award, DARPA award
Assistant Professor Tim Weninger has received three research awards totaling about $1.5M over five years. Weninger received the Army Research Lab’s Young Investigator Award (YIP) for a project that learns patterns of human conversation on small groups and teams. Weninger has also received the NSF CAREER award for a project titled “Principled Approaches for Structure Discovery in Networks.” The YIP and CAREER awards are the highest awards given to young researchers by the Army and NSF respectively. Together with researchers from USC and Google, Weninger will lead Notre Dame’s effort on DARPA’s Social Simulation program, which will simulate and predict how humans consume and share information in online social media.

Bui Named the College of Engineering’s Outstanding Teacher for 2017
Professor Peter Bui was named the 2017 Outstanding Teacher of the Year for his enthusiastic teaching style and zeal for the subject matter. Students describe him as a challenging professor who pushes them to read and think critically, and to listen to their peers. Bui inspires his students to be better engineers and better people by creating fun, yet challenging, coursework that is “intellectually rigorous but never impossible.”

A Notre Dame alum, Bui’s research interests encompass distributed and parallel computing, systems programming, web services, and computer science education.
Leadership Transition in CSE

Professor Kevin Bowyer, Schumehl-Prein Family Professor of CSE, recently completed his time as department chair of CSE after sixteen years of service that has seen explosive growth in every measure of the discipline and the CSE department. Since 2001, the number of undergraduate majors has tripled in size, research expenditures have quadrupled, and the number of graduate students has more than doubled. In June 2017, the Department celebrated Dr. Bowyer’s years of service that has seen explosive growth in every measure of undergraduate majors, graduate students, and research expenditures. Since 2001, the number of undergraduate majors has tripled in size, research expenditures have quadrupled, and the number of graduate students has more than doubled. In June 2017, the Department celebrated Dr. Bowyer’s years of service that has seen explosive growth in every measure of the discipline and the CSE department.

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From former CSE department chairs, deans of Engineering, and others whose work was impacted by Kevin’s service. An especially moving letter of appreciation to Professor Bowyer was included in the following passage:

"Thank you for 10000 years of service" (computer scientists and engineers know that 10000 (base two) is 16 (base ten)).

Since the late 1980s, I’ve harbored the notion that the future of all engineering disciplines will be driven strongly by information technologies and that CSE and EE represented the tip of the spear. I am ever more confident in that vision and couldn’t be more pleased with what you’ve done to elevate the stature of the department, not only within the college but nationally and internationally. You’ve exceeded my every expectation.

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Apply for your own "Chair for 10000 Years!"