UMN Receives $4.3 Million NSF Grant on Water Sustainability

Alumni Profile: David Ching • SME Chapter Explores Mining
UMN Receives $4.3 Million NSF Grant to Study Interactions Between Water and Land–Use Systems

The University of Minnesota (UMN) has received a $4.3 million Water Sustainability and Climate grant over five years from the National Science Foundation to lead a study on the interactions between climate, water, and land-use systems. The grant will specifically examine impacts of land use and climate change on water quality and ecosystem health using the Minnesota River Basin as a prototype.

The University of Minnesota-Twin Cities is the lead institution for this grant that involves researchers from institutions across the country such as the University of Illinois at Urbana-Champaign, Johns Hopkins University, Utah State University, University of Washington, Iowa State University, and the University of Minnesota-Duluth.

The researchers will develop a framework for identifying and predicting processes, locations and times that are most susceptible to accelerated change. This framework is envisioned to guide decision and policy making toward a healthy and resilient environment. The research team has chosen the Minnesota River Basin as a location for their research because it encompasses an extremely broad spectrum of natural and human-induced rates of change and sensitivity to land-use practices. Of particular interest is the interaction between land use and river network processes. Many of the state’s waterways already exceed recommended amounts of sediment and nutrients.

“This grant brings together some of the top scientists and engineers from across the country to study one of the most important issues of our time—water sustainability under climate and human stressors,” said Prof. Efi Foufoula-Georgiou, the lead researcher on the grant. “Change is often inevitable, but if we can use the best of science to understand the ‘workings of a system,’ its complexities, feedbacks, and vulnerabilities to change, we are half-way toward sustainability. The other half is working with decision and policy makers to implement science-based solutions.”

Department Forms New Partnership with Norwegian University of Science and Technology

The Department established a new partnership with the Department of Hydraulic and Environmental Engineering at the Norwegian University of Science and Technology (NTNU). NTNU is the premier science and engineering university in Norway and is located in the beautiful city of Trondheim overlooking the spectacular Trondheim Fjord. The partnership is funded by a $2 million NOK (~$330,000) grant from the Norwegian Center for International Cooperation in Education and is aimed at strengthening ties between the environmental engineering and water resources groups of the two universities. Prof. Torolve Leitnes (NTNU) and Ray Hozalski (UMN) are the co-principal investigators of the grant, and the St. Anthony Falls Laboratory is a project partner as well. A portion of the funds will be used to host a series of faculty workshops alternating between the two institutions to develop the program and build lasting relationships. Most of the funds, however, will be used to support graduate and undergraduate student exchanges. UMN CivE students should look for more information in the coming weeks regarding how to apply for the exchange program.
President Obama Names Foufou-Gai to U.S. Nuclear Waste Technical Review Board

The White House announced that President Barack Obama has appointed Prof. Efi Foufoula-Georgiou as a new member of the U.S. Nuclear Waste Technical Review Board. Prof. Foufoula-Georgiou is one of only eight individuals nationwide who was appointed to the board. The Nuclear Waste Technical Review Board is an independent agency of the U.S. Federal Government. Its sole purpose is to provide independent scientific and technical oversight of the Department of Energy’s program for managing and disposing of high-level radioactive waste and spent fuel. Prof. Foufoula-Georgiou has served as the director of the National Center for Earth-Surface Dynamics at the University of Minnesota since 2008. She has also served on the National (TMS). Fellow membership is one of the highest awards that can be bestowed on a Society member and is granted for exceptional service by individuals who have been a member for more than ten years. Prof. Schultz has served TMS in a variety of roles, including past member of the Board of Directors, member of the Masonry Standards Joint Committee, and investigator for TMS of damage from tornados in Minnesota. Nominators recommended Prof. Schultz for fellow membership for his analytical, experimental, and numerical investigation of the stability of slender masonry, prestressed masonry, and concrete structures, for his activities in the design and development of precast and prestressed concrete. Prof. Schultz also has been named a Fellow of The Masonry Society of Women Engineers. He is also a Fellow of the American Geophysical Union, American Society of Civil Engineers, and the Society of Women Engineers.

Schultz Receives Korn Award and Named Masonry Society Fellow

Prof. Arturo Schultz was given the Martin P. Korn Award from the Precast/ Prestressed Concrete Institute (PCI) at the 58th Annual PCI Convention on October 2, 2012. Schultz won the award for a paper he co-authored titled “Experimental Investigation of the Web-Shear Strength of Deep Hollow-Core Units,” published in the Fall 2011 issue of PCI Journal. The PCI Journal awards the honor to one paper each year to recognize work “worthy of special commendation for its merit as a contribution in design and research to the advancement of precast and prestressed concrete.” Prof. Schultz also has been named a Fellow of The Masonry Society of Women Engineers.

Foufoula-Georgiou Named President-Elect of AGU Hydrology Section

The American Geophysical Union (AGU) announced the election of Prof. Efi Foufoula-Georgiou as the president-elect of the organization’s hydrology section. AGU is the largest scientific organization in the world, with more than 62,000 members worldwide. Its mission is to promote the understanding of the Earth as a system and to provide scientific leadership for the benefit of humanity. Prof. Foufoula-Georgiou has served as the director of the National Center for Atmospheric Research’s Geophysical Union, American Society of Civil Engineers, and the Society of Women Engineers.

UoM-SME members tour the Hibbing Taconite Mine. Credit: Stefanie Mayer

The group has also traveled to regional and national conferences such as the 2012 national SME conference recently held in Seattle, WA. “The conference included more than 200 vendors, including a large majority of people who were recruiting students for jobs, which was awesome,” said Horst. UoM-SME has a keen interest in touring mining facilities to get a behind-the-scenes look at the work being done. The process used to create the taconite is actually more intense and large scale than any of us were expecting.” UoM-SME hopes to offer additional tours in the coming months examining different aspects of mining, such as exploration. To learn more about or support this great group that is digging into the topic of mining, visit www.tcrel.umn.edu/~sme.
**Awards & Accomplishments**

**Faculty**

Roger Arndt
Submitted the invited papers “Cavitation Research From an International Perspective,” 26th LAHR Symposium on Hydraulic Machinery and Systems, Tsinghua University Beijing, China and “Introduction to Cavitation,” 2012 International Forum on Fluid Machinery and Engineering, Jiangsu University, Zhenjiang, China.

Bill Arnold
Received the 2012 Malcolm Firnie/AEESP Frontier in Research Award and the 2012 Outstanding Mentor Award from the President’s Distinguished Faculty Mentor Program, Office of Equity and Diversity.

Roberto Ballarini

Stefano Gonella
Received the Bonestroo, Rosene, Anderlik and Associates Undergraduate Faculty Award.

John Gulliver
Appointed as a Resident Fellow of UMN’s Institute on the Environment.

Carol Shield
Received award for outstanding contributions to the NEES community in the Area of Site Operations and Collaboration.

Minnao Liao, Ph.D. ’11
Appointed assistant professor of structural mechanics in the Department of Civil Engineering at Chongqing University in China.

Cory Markfort, Ph.D. candidate
Awarded a NASA Earth and Space Science Fellowship and also the Outstanding Student Paper Award from AGU’s Atmospheric Science Section and Hydrology Section.

Nebiyu Tilahun, Ph.D. ’10
Appointed assistant professor in the Department of Urban Planning and Policy at the University of Illinois at Chicago.

Kristina Wagstrom, Ph.D. Post-doc
Received the 2012 American Association for the Advancement of Science’s Science Policy Fellowship.

Teng Zeng, Ph.D. ’12
Runner-up for the 2012 Floyd Forsberg Environmental Quality College Scholarship

Lei Zhang, Ph.D. ’06
Won TRB’s Fred Buggraf Paper Award for paper 11-4223 - Behavioral Foundation of Route Choice and Traffic Assignment.

**Students**

Ben Dymond, Ph.D. student
Received the American Concrete Institute’s 2012 President’s Fellowship.

Megan Kelly, Ph.D. candidate
Received ACS’s 2012 Environmental Chemistry Division Graduate Student Paper Award and the Butler and Jesse Water Resources Science Fellowship, 2012.

The Department of Civil Engineering’s weekly Warren Lecture Series is now being streamed live and archived online. Viewers wishing to watch the lectures live can login from their computers to see the presentation, slides and submit questions. To watch live streams and archives visit: http://www.ce.umn.edu/events/warren_index.html

Below is a list of new archived lectures available for viewing:

**February 17**
Daniel Bond
Department of Microbiology and BioTechnology Institute, University of Minnesota
“Why the Molecular Basis of Electron Transfer to Metals Matters”

**February 24**
Timothy LaPera
Department of Civil Engineering, University of Minnesota
“Municipal Wastewater Treatment as a Potential Solution to Antibiotic Resistance”

**March 9**
Marko Ivetic
Department of Hydraulic and Environmental Engineering, University of Belgrade
“Hydraulic Transients: From Extreme Events Analysis Towards Dynamic Monitoring of Pipe Systems”

**March 23**
Antonio Bobet
School of Civil Engineering, Purdue University
“Seismic Design of Underground Structures: Lessons from the Failure of the Daike Station”

**April 6**
Gary Davis
Department of Civil Engineering, University of Minnesota
“Cross Validation in Crash Reconstruction: Bayes Meets Popper?”

**April 13**
Lev Khazanovich
Department of Civil Engineering, University of Minnesota
“Mechanistic-Empirical Design of Concrete Pavements: Past, Present, and Future”

**April 20**
Roman Hryciw
Department of Civil and Environmental Engineering, University of Michigan
“Image-Based Characterization of Earth Materials”

**Lectures & Webcasts**

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Stay Connected!

In recent months I’ve had the chance to meet with alumni over lunches with Joe Labuz on campus. Conversations have been great, with stories providing favorite campus memories, toughest classes, faculty members who made a difference, old classmates and future careers launched from the University of Minnesota. The stories are as great as the varied careers that civil engineers pursue. In 2013 the department will again open its door to invite alumni to visit. If you have not been back to campus, please consider the opportunity to reconnect with fellow alumni.

Once again, the College of Science and Engineering undergraduate class has brought even more of the best and brightest students from Minnesota and beyond to campus. We thank many of you who have provided financial support to our students through your continued giving in helping ease the pressures of overwhelming student debt.

With this goal in mind, the University of Minnesota Foundation has created the Fast Start 4 Impact program. This program has provided a unique opportunity to create new, named scholarships and fellowships endowed to support civil engineering students. The Fast Start Program allows you to see the immediate results of your giving. These gifts ensure your legacy with a scholarship or fellowship in perpetuity. If you’d like more information about this or any other giving opportunity, please email me at euson@umn.edu or call me at 612/625-6035.

Thank you for your commitment to the Department of Civil Engineering. We hope to see you on campus soon!

Warm regards,
Sally Euson

Alumni News

Donald Dencker

Donald Dencker was born on November 25, 1924 in Minneapolis to Fred and Mabel Dencker. He graduated from Roosevelt High School in Minneapolis in June 1942 and entered the U.S. Army in June 1943. He fought on Leyte, Philippines, and Okinawa, Japan in a Rifle Company, Amphibious 96th Infantry Division.

Don obtained his bachelor's degree in civil engineering from UMN in March 1949. He was awarded a Master's degree in civil engineering while serving in the Army in Korea. Don was in an Army Aviation Engineer Battalion that built the Suwon airbase for the Air Force, which included a 9,000-foot tactical runway where up to 200 missions per day were flown.

His initial work experience was as a sanitary engineer with Pfeifer & Schultz Engineers in Minneapolis, and for two years he was City Engineer of Columbia Heights. In February 1958, he started work with Oscar Mayer Foods Corporation in Madison, Wisconsin. He was an environmental engineer and later, manager of major engineering projects. Don was appointed to the executive management group, and he was chairman for 16 years of the American Meat Institute Environmental Committee. In addition to environmental issues, Don was responsible for the design, bidding, construction and startup of four major plants, plus several remodeling projects. Don retired from Oscar Mayer on April 1, 1991.

After retiring, Don worked on meat industry environmental projects for the Agency for International Development in Estonia, Poland, Jordan, and Chile from 1992-94. These projects involved working with local meat plants to conserve water and reduce losses to the sewer systems. Don then started consulting for Oscar Mayer and was involved in the design and construction of the Superior AgResource facility plant in California. Don also had an extended project at the Kraft Foods cream cheese plant in upstate New York.

Don had several articles published in technical magazines, and he is the author of the book “Love Company: Infantry Combat Against the Japanese, Leyte and Okinawa.” Don has been an active member of Trinity Lutheran Church, Madison, Wisconsin and served as church president. Don has four daughters - Nancy, Kimberly, Lynn, and Ann - of whom he is very proud.

Sherry Van Duyun

Sherry Van Duyun is a P.E. and Certified Hazardous Material Manager who works in the environmental field, specifically brownfield redevelopment and remediation. Sherry's work experience includes an internship at the Metropolitan Council of Environmental Services; Naval Facilities Engineering Service Center, Port Hueneme, California for five years; Barr Engineering for seven years; and currently a Vice President at Landmark Environmental, where she was one of the original founders of the company in 2000. Landmark is a small business assisting clients who buy, sell, or manage properties affected by contamination or environmental issues. Sherry has worked on a variety of design and remediation and/or brownfield redevelopment sites, such as UMN Como Community Housing soil remediation, Bruce Vento Nature Sanctuary and the former Hennepin Paper Mill in Little Falls. Sherry is currently on the UMN Executive Advisory Board to the Department of Civil Engineering and is the Small Business Liaison for the Society of American Military Engineers. She assisted with co-hosting a three-day environmental regulations class for the North Central Section of the Alliance of Hazardous Material Professionals from 2004-2012.

Sherry is married in August to Jerrald Spencer, and currently a Ph.D. student in biomedical engineering at the U, and Andrew, who just graduated from the Carlson School majoring in marketing and international business, and now works in his new job at the Nelson Corporation.

While at the U in the 60’s, Thomas survived Lower Division despite a nasty professor or two, and enjoyed his civil engineering courses, particularly those in water resources, and fondly remembers character-building experiences walking around campus in his Army ROTC uniform and being warmly regarded by thousands of idealistic draft dodgers. Thomas worked as a civil engineer for the city public works department for 34 years, finishing as Director of Public Works. He retired in 2001, but started working again part-time for TKDA, and has been there for nearly 10 years. Both are great places to work as an engineer.

Marcus Thomas

Marcus Thomas is a 1994 graduate of UMN, immersing himself in the civil engineering program as well as several ensembles within the School of Music, including the Pride of Minnesota – the UMN Marching Band. As an undergraduate, Marcus completed an internship with Bolton & Menk, Inc., which afforded him a full-time position with the firm immediately after graduation. Since that time, he has developed his career with Bolton & Menk, dedicating his efforts towards advancing the values of the firm and the success of its clients. He is currently a principal of the firm and manages the firm’s Burnsville office. Marcus has built a diverse resume of projects focused on improving Minnesota cities.

The services he has provided have ranged from feasibility studies to forensics and from legislative lobbying to public engagement and consensus building. His projects have rejuvenated neighborhoods through improved roads, sewers and water distribution. He has assisted in reclaiming environmentally damaged sites and reestablishing them as public amenities. His infrastructure rehabilitation and streetscape projects have been catalysts for “main street” economic growth in revitalized downtowns. The sizes of his projects have ranged to more than $10 million and have been recognized by awards from organizations such as the American Public Works Association, Minnesota Society of Professional Engineers, and the American Council of Engineering Companies.

Marcus met his wife, Nicole, in the UMN Marching Band, and they currently live in Savage, Minnesota, where they are raising two children, Amaya (12) and Joshua (9).

Thomas Eggum

Thomas Eggum (pictured on left with family) is a life-long St. Paul resident. He grew up on the East Side but made a dramatic move to the West Side in 1975. Thomas has been happily married to Mari Oyanagi Eggum for almost 30 years. Together, they raised two kids in Saint Paul: Julienne, married in August to Jared Spencer, and currently a Ph.D. student in biomedical engineering at the U, and Andrew, who just graduated from the Carlson School majoring in marketing and international business, and now works in his new job at the Nelson Corporation.

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Continuing Education Events

The Geotechnical Conference, Structural Seminar Series, and the Concrete Conference aim to empower working professionals with current knowledge and best-practices.

Every practicing civil engineer and geotechnical engineer knows learning about their field is an on-going duty long after leaving campus with degrees in hand. As technology, building methods, and the needs of society change, engineers need innovative and efficient continuing education to help them serve their employers, communities, and professional interests in the best ways possible. With this in mind, the Department offers a trio of professional development events that welcome engineers back to campus with opportunities to sharpen their minds and skills with presentations from local and international authorities.

The Geotechnical Conference

The Annual Geotechnical Engineering Conference draws geotechnical engineers from across North America and is a cooperative effort between the Department and the Minnesota Geotechnical Society. It keeps the interested members of the geotechnical community apprised of what’s happening and on the cutting edge of the industry,” said Merv Mindess, Co-founder of the Minnesota Geotechnical Society and a conference organizer. The first University of Minnesota Annual Geotechnical Engineering Conference was held in 1953 and in the building that is now the Bell Museum, Renowned Prof. Miles Kersten spearheaded the development of the conference with the help of other engineers from local firms and government agencies. The conference eventually became a popular that extra seats had to be set up in the Bell's auditorium to accommodate the overflow of attendees. In recent years, Prof. Joe Labuz has updated, expanded, and refined the conference, further raising its appeal and routinely attracting more than 200 participants. “Prof. Labuz has done wonders to grow the conference,” said Mindess.

There have been a number of key additions and changes to the event. For one, the event has moved to the larger Continuing Education and Conference Center on the St. Paul Campus. More importantly, the day before the actual conference, short courses are offered on current topics and are open to students or engineers who want to attend. The actual format of the conference has also evolved to include a blend of presentations by national and international authorities, question-and-answer sessions, scholarship presentations, and industry exhibitors. The highlight of the conference is the keynote Kersten Lecture, named for the conference’s founder, and has included a host of international presenters including Robert Holtz, Ken Stokoe, and Ed Cording the past three years.

“Visitors say the geotechnical conference is the highest quality of all the regional conferences.”
- Merv Mindess

The event now even includes case histories presented by Minnesota firms and engineers, which add local interest to the event. These histories bring the conference home and make it close and personal when they’re talking about projects you’ve driven by or participated in,” said Mindess.

The net result of all the great features of the conference is it draws engineers from across Canada and the Midwest based on the its great reputation. “Visitors say the UMN Annual Geotechnical Conference is the highest quality of all the regional conferences,” said Mindess.


The Structural Seminar Series

The Structural Engineering Seminar Series has a determined focus to give practicing engineers the tools and knowledge they need to succeed. “This is a land grant university and we’re here to serve the community,” said Emeritus Prof. Ted Galambos. Prof. Galambos has been a member of the planning and taking place for 30 years, and he believes outreach is the key to ensuring professionalism in engineering. With this value in mind, the series is instilled with a mandate to put research into practice by placing new concepts, methods, and design tools into the minds and hands of “nuts and bolts” engineers. “This is where learning happens and this is the place where we connect with the community,” said Galambos.

The Structural Engineering Series has been run by the Department and the College of Continuing Education for over 50 years and is a cooperative effort between the planning committee and is a secondary method for ensuring such in industry exhibitors. The planning committee’s primary method for ensuring such interests is the consideration of surveys filled out by the previous year’s attendees. The surveys diligently probe the participants for their opinions on what they liked, disliked, and what they’d like to be learning. The planning committee pours over the surveys to identify the most popular topics, and then uses them for the basis of the next year’s schedule. Examples of upcoming topics include the design of multi-family wood structures in North America; changes to the international building code; and the design of the new St. Croix Extradosed Bridge.

The 2013 Structural Engineering Series will be held January 23-February 27, 2013. See www.cce.umn.edu/structural for more details and registration information.

The Concrete Conference

In 1950, concrete industry professionals met with UMN faculty and continuing education staff to design a professional development program for engineers, contractors, architects, consultants, educators, and engineering students. The result was an inaugural conference in December 1951 that became an annual University offering. “The conference is one of the oldest local concrete conferences in the nation, and as a result has an established history of bringing together professionals in engineering, architecture, and construction,” said conference organizer Prof. Lev Khazanovich.

Through the years, concrete construction concepts and technology have changed in response to new and recurring challenges facing the industry. Performance, durability, restoration, repair, innovation, and research continue to be important topics for those involved in concrete construction. Conference presenters include practicing engineers, engineering faculty, and consultants who offer information on current technology and practice.

The Concrete Conference presents a wide range of topics in concrete, from new construction techniques to advancements in materials research, and relates these topics to the state-of-the-art as applied to projects in the field. It is well attended and is an excellent opportunity to learn about concrete-related issues for engineers/contractors in Minnesota.

Beginning in 1974, the Concrete Conference Planning Committee began presenting an award to concrete industry professionals for outstanding service to the industry. “This year Prof. Cathy French will be recognized for her service to the concrete community in Minnesota,” said Khazanovich.

The date for the 2013 Annual Concrete Conference is yet to be announced. However, once it’s announced, details can be found at: www.cce.umn.edu/Annual-Concrete-Conference/index.html.

- Ted Galambos

“If this is a land grant university and we’re here to serve the community.”
- Ted Galambos

The events frequently take place inside the U of MN’s Continuing Education and Conference Center.

- Lev Khazanovich

“If this year Prof. Cathy French will be recognized for her service to the concrete community in Minnesota.”
- Lev Khazanovich

12 Civil Engineer | Fall Semester 2012 Civil Engineer | Fall Semester 2012
For civil engineering graduate David Ching (B.C.E. ’73, M.S. ’76, Ph.D. ’80) work and learning have always been intertwined. From his days growing up on a farm, to his double-duty working full-time on a Ph.D. and for Control Data, he’s always learned from his work and worked while learning.

Dr. Ching grew up on a dairy farm near Watertown, South Dakota. “That’s where I learned a strong work ethic,” said Ching. “I was working all the time and there wasn’t a lot of time to goof around.” With his work ethic in mind, he became enamored with the prospect of being a civil engineer after seeing a presentation during his senior year in high school. “I saw pictures of huge structures, bridges, and that type of thing, and thought ‘it would really be great to put your name on something like that’.” Ching quickly decided he would start on the road to civil engineering by enrolling in the South Dakota School of Mines and Technology. Two years later, in 1970, a recurring summer construction job in the Twin Cities would motivate him to transfer to the University of Minnesota’s nationally renowned civil engineering program. Ching’s working-student strategy not only allowed him to pay for school, but it would also set in motion the work-and-learn cycle that would make him so successful.

Ching was first fascinated by structures, but his day job with the design firm of Comstock and Davis had him developing sewer systems. In response, Ching started taking environmental engineering courses to help him in his job. The value of his courses and instructors soon convinced him to focus on environmental engineering. “Dr. Maier and Dr. Johnston influenced me to continue because they knew the sort of problems the world would be facing in terms of clean water,” said Ching.

By 1976, Ching had earned bachelor’s and master’s degrees while continuing to work for Comstock and Davis. He had also developed a fledgling interest in computer programming to help him speed through mundane calculations. “We saved days, if not weeks of work,” said Ching. “Right there the computer became my friend.”

Ching’s blooming relationship with computer technology flourished when he moved to a new position involving process control systems for water treatment plants with Autocon Inc., a subsidiary of Control Data Corporation. “One of the perplexing problems people dealt with at the time was the activated sludge process,” said Ching. Plant engineers were having trouble monitoring the process to keep it working efficiently. Ching set out to design a computer model and control system for the process, and also decided to turn it into a dissertation topic for his Ph.D. Ching completed his Ph.D. degree in 1980 just as the first desktop computers were becoming available.

Ching started to think that networked desktop computers could easily put the power of his sludge process control system in the hands of everyday water treatment plant engineers who needed it most. But in order to do that, first-of-its-kind software would have to be created to link the desktop machines to the massive mainframes hosting the process control system. Ching tried to partner with Control Data on the software, but the computer giant’s recession-related business troubles stymied any chance of quickly bringing the technology to market. The recession prompted Control Data to sell Autocon in 1985. “I was with the new company for about six months and realized I wanted to start my own company,” said Ching.

Ching soon opened the doors on Facility Management Technology Incorporated. His first major decision was choosing whether to build his software for the tried-and-true Unix system, or the new, unproven PC-based MS-DOS. “I decided to go the MS-DOS route, which was fortunate,” said Ching. As history and the rise of microcomputers have proven, Ching made a very good choice indeed.

Microsoft has proven, Ching made a real-time process control system – where else would I use that?,” said Ching. “I’d use that just about anywhere, such as an airliner or building HVAC system.” Ching cleverly retooled the original software into a processing engine with a drag-n-drop interface that could be skinned for other industries. With its expanded appeal, Ching morphed Facility Management Technology into MGSoftware in 1997, and evolved into developing business transaction monitoring systems and middleware for hallmark companies like IBM, HP, and Oracle. Ching sold MGSoftware to technology industry juggernaut BMC Software Inc. in 2009.

Ching’s next company is discreetly building on his previous successes. For a hint of what’s coming, look at what Ching’s done so well before: harnessed the combined power of learning while working.

Alumni! We’d love to hear from you!

This issue and future issues of Civil Engineer will include stories and updates from graduates as a means to help reconnect people and highlight the incredible achievements of our alumni. Please feel free to send us a note detailing your successes and include a picture too! You can reach us through e-mail, Facebook or regular postal mail as well.

E-mail: civenews@umn.edu
Facebook: www.facebook.com/umn.civ
Mailing Address: Department of Civil Engineering 500 Pillsbury Drive S.E. Minneapolis, MN 55455
Scholarships & Awards

The Department of Civil Engineering awards one of the largest number of undergraduate scholarships in the College of Science and Engineering each year. These scholarships are made possible by the generous donors highlighted below.

Clifton T. Barker Scholarship
This scholarship is for sophomores or juniors who have above average ability with GPA averages of 3.5 or better.
- Reuben Verdoljak

Guy N. Bjorge Scholarship
This scholarship is for junior or senior geoengineering students.
- Michael Kondziolka
- Samuel Boone Konieczny
- Zachary Sudman

Department of Civil Engineering Scholarship
This scholarship is for undergraduate students in civil or geoengineering on the basis of merit.
- Nick Preiser
- Steven Sletten
- Xu Yunhan

Theodore V. Galmabos Scholarship
This scholarship is to honor Prof. Emeritus Ted Galmabs and the Department’s structural engineering program.
- Natalie Lindsay
- Ashley Marcott
- Rob Roy

Andrew Drescher Scholarship
This scholarship is named in honor of Andrew Drescher, an internationally renowned researcher in the area of geomechanics. This gift is intended to provide a scholarship for undergraduate civil and geoengineering students with an interest in geotechnical engineering.
- Lindsay Ellingon
- Megan Horst

Edmund J. Longyear Memorial Scholarship
This scholarship is to encourage highly qualified, financially eligible students to obtain training in geo-engineering.
- Chunwei Ge

James C. Olson Memorial Undergraduate Scholarship
This scholarship is in memory of James C. Olson to pay tribute to his achievements while assisting undergraduate students in the Department of Civil Engineering.
- Christopher Young

Excellence in Civil Engineering Scholarship
This scholarship is aimed at outstanding students wishing to pursue a challenging career that is enabled by graduate study.
- Ryan Ballard
- Chris Ivenson
- Luke James
- Michelle Maciej
- Matthew McLaugh
- Scott Miller
- Chelsey Palmateer
- Kipp Sande
- Nathan Warne

Al Johnson Construction Company Scholarship
This scholarship is for civil engineering students who exhibit outstanding scholarship, leadership, boundless curiosity, and untiring work ethic.
- William Barghahn
- Lina Breidenbach
- Kristopher Borchardt
- Tierney Broberg
- Javier Campos
- Matthew Duff
- Christopher Erickson
- Alexandra Miller
- Thomas Hall
- Tanner Swenson

John Elwood Holmberg Memorial Scholarship
This scholarship is named in memory of John Holmberg for part-time students in the department who are working their way through school.
- Joseph Betland
- Lauren Wimler

Florence Hanson Waits Scholarship
This scholarship is to honor James Grant Waits.
- Kristin Anderson
- Afaf Bennani
- John Bobzien
- Matthew Bonnema
- Daniel Chouinard
- William Cummins
- Braden Cuy
- Joseph DeVore
- Brad Fisher

Minnesota Surveyors and Engineers Society Scholarship
This scholarship is in memory of John Holmberg is for part-time undergraduate students in civil engineering.
- Kristin Anderson
- Thomas Hall
- Michael Kondziolka
- Chelsey Palmateer

Bonestroo, Rosene, Anderlik Undergraduate Scholarship
This scholarship is for civil engineering students who have completed one-half of the curriculum and have at least one year of schooling remaining.
- Scott Miller

ASCE Minnesota Scholarship
This scholarship is awarded to a senior Chi Epsilon student in the Department of Civil Engineering.
- Reuben Verdoljak

Chester D. Okerlund Award
This award is named in memory of Chester D. Okerlund and is given each spring to the civil engineering student who graduated with the highest GPA during the preceding year.
- Jonathan Manning

City Engineers Association of Minnesota Scholarship
The City Engineers Association of Minnesota (CEAM) Scholarship Program offers scholarships to students focusing in areas that are most closely aligned with city engineering such as transportation, water resources and environmental - sanitary and water systems.
- Scott Miller

WSB & Associates Scholarship
This scholarship is for full-time undergraduate civil engineering students who have completed one-half of the curriculum and have at least one year of schooling remaining.
- Jessica Tello

ASCE Minnesota Scholarship
This scholarship is awarded to a senior Chi Epsilon student in the Department of Civil Engineering.
- Reuben Verdoljak

President’s Match Scholarships
Over $75,000 was awarded to our civil engineering students through the President’s Scholarship Match program. These named scholarships are initiated by a generous donor and then matched dollar-for-dollar by the University. These matched scholarship endowments provide additional opportunities for our freshman and transfer students to receive renewable awards when academic criteria are met.

3M/ Coleman Scholarship
- Zachary Cotter
- Matthew Duff
- Lindsay Gaines
- Ryan Kelly
- Avi Kumar
- Kelsey Peterson
- Gebi Tahiro

Gerald W. Everson/ Ames Construction Scholarship
- Rachael Acevedo
- Kelsey Cox
- Morgan Kuehn
- Charlie Vermace

Miles Kersten Memorial Scholarship
- Jedidiah Dordal

Vorpahl Family Memorial Scholarship
- Matthew Duff
- Steven A Johnson
- Derek Walden

Westwood Professional Services Scholarship
- Adam Kirchoff
- Emily Nilsen
- Raymond Thelier
Laloui Presents 2012 Vardoulakis Lecture

Prof. Lyesse Laloui, Head of the Department of Civil Engineering at École Polytechnique Fédérale de Lausanne (EPFL) in Lausanne, Switzerland, presented the 2012 Vardoulakis Lecture. Prof. Laloui is chaired professor and Director of the Soil Mechanics Laboratory at EPFL, where he developed a large group in the areas of soil mechanics, geoengineering, and CO2 sequestration.

Prof. Laloui’s seminar was titled “Hydro-Mechanically Coupled Processes in Rainfall-Induced Landslide Modeling.” The lecture is named after former Prof. Ioannis Vardoulakis, who was a faculty member of the Department from 1980-1987, and passed away in 2009.

Joe Labuz presents Lyesse Laloui with a commemorative plaque.