

## The Distinguished Service Award

The 2014 Distinguished Service Award (DSA) recipient is Theodore J. Branoff of North Carolina State University. The DSA is the highest award of merit given by the Engineering Design Graphics Division. It recognizes the significant contributions of the recipient to the Division in terms of leadership, authorship, or support.

The awardee is recognized with a framed citation or plaque, which is presented by the Division Chair or their delegate at the Annual Conference Awards Banquet. Following the presentation, the recipient may address those assembled.

The award description can be found at:  
<http://edgd.asee.org/awards/dsa/index.htm>

A complete list of awardees can be found at:  
<http://edgd.asee.org/awards/dsa/awardees.htm>

[1] Engineering Design Graphics Division Member, Aaron Clark, introducing the 2014 DSA recipient.

[2] Branoff delivering his DSA acceptance remarks.

[3] Engineering Design Graphics Division Chair, Dennis K. Lieu, presenting the DSA plaque.

Photos from *Theodore Branoff*



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## **Introduction**

It is an honor to introduce to the Engineering Design Graphics Division our newest Distinguished Service Award recipient, Dr. Theodore J. Branoff. Dr. Branoff received his degrees from NC State University in Raleigh, North Carolina where he worked his way from Lecturer to Associate Professor. Prior to coming into higher education, he worked as a draftsman in industry and currently still consults outside of academia. He has held many leadership roles in our profession at both national and international levels including President of the International Society for Geometry and Graphics, Chair of the Engineering Design Graphics Division of ASEE, Associate Editor of the *Engineering Design Graphics Journal*, and various other committees for the division including Program Chair and Director of Professional and Technical Committees. Dr. Branoff has worked at the regional level as well, being the past Chair of the ASEE Southeast Section of the K-12 Division, Instructional Unit Division, and the Engineering Design Graphics Division. He continues to be a reviewer for many top research journals in fields related to education and engineering, and has served on over 32 graduate student committees, and directed over nine dissertations and theses. He is one of the few ASEE Fellows within our division, and has won the Division's Editor's Award four times and the Chair's Award three times since he became a member of ASEE. He is a NC State University College of Education Alumni Distinguished Undergraduate Professor, and has been awarded the Outstanding Teacher Award three times within the College of Education at NC State University. Dr. Branoff has countless publications in journals, proceedings, and books related to our discipline, including many national and international presentations. He has been an invited speaker internationally multiple times representing our discipline and our division. Dr. Branoff has served this profession and division with the highest regard to service and dedication. We are fortunate to have people like Dr. Branoff as one of our colleagues and to serve as a great role model for future leaders in our field.

Aaron C. Clark, DTE

**Theodore J. Branoff's DSA Acceptance Remarks  
ASEE Annual Conference  
Indianapolis, IN, June 15-18, 2014**

Thank you. I am truly grateful to the people in the Engineering Design Graphics Division for the majority of my professional development. Since 1987 the members of this division have pushed me out of my comfort zone and helped me develop as a leader, educator, and scholar. But I also want to take this opportunity to recognize the people who have helped me to get to this point in my career.

**Jim & Donna Branoff** – Even though we had a very modest household income when I was young, my parents always found a way to make sure us kids were able to participate in extracurricular activities like baseball and hockey. I truly believe that these sports, as well as building things around the house, helped to develop my spatial abilities.

**Tom Domagala** – When I was about 10 years old I met Tom. Tom is about 9 years older than me. He lived in my aunt's neighborhood, but he became real good friends of my family. He helped coach hockey with my dad, and he also went on some family vacations with us. But the thing that really interested me about Tom was his expertise in drafting. He worked for a company that did contract work for the automotive industry. He would bring by some of the drawings he was working on, and I even got a chance to visit his office once. Tom was the person that really got me fired up about design and engineering graphics.

**Mr. Wainwright** – Mr. Wainwright was my junior high industrial arts teacher. Junior high was my first exposure to formal instruction with engineering graphics. I remember laying out multi-view drawings from pictorials and pictorials from multi-view drawings in this little area between the wood shop and the metal shop. I think Mr. Wainwright recognized that a couple of us in the class had a special talent in engineering graphics. He allowed us to explore some things that other students didn't find appealing. We also got to build some really cool stuff in his classes that contributed to our spatial abilities and technical skills.

On to high school and a move to North Carolina.

**Gail Parker** – Mr. Parker was the first drafting teacher I had in high school in North Carolina. He taught me almost everything I know about architectural graphics – and a whole lot about having fun. He also got me involved in VICA. This was the first time I had competed in any academic competition.

**Earl Crumb** – Mr. Crumb retired from a successful engineering career in New York State to become the drafting teacher at Zebulon High school. As a senior who had been at the school for just over two years, I thought I knew everything. I was prepared to breeze through my senior year in advanced drafting, but Mr. Crumb had other things in mind. He gave me a D on my first assignment, and my whole attitude about his class changed. I knew this guy was going to change the way I saw engineering graphics. I learned more in that year than I did in the previous 5 years in school. We drew things on Mylar with plastic leads and ink. He would randomly tear your drawing to see if you could repair it. That year I won the regional VICA competition and went to the State conference. Not knowing exactly what I wanted to do as a career, I applied and was accepted into mechanical engineering at NC State.

**Gordie Dotterer** – During high school I worked for my dad's company, Measurements Group, Inc., doing yard maintenance. In the summer of 1981 the drafting department hired me to do printed circuit board layouts of instrument devices in the strain gage industry. Most of my work was ink on Mylar, and it was my first time using a Leroy Lettering set. Gordie Dotterer was my boss. He also happened to be one of my best friend's dad. The few times I did use vellum I can remember Gordie yelling at me for pressing down too much with my pencil. This happened a couple times. I lightened up some to make him happy. Later in college I seem to remember hearing someone say that those who press down hard while writing are very confident in what they are doing. I don't think Gordie would appreciate that explanation.

**Garland Hilliard** – One of the first classes I was enrolled in at NC State was GC101. I sat through the first class with Ben Webb patiently – recognizing all of the content that would be covered. I talked with Mr. Webb after class about placing out, and he told me I would have to bring my portfolio of work to Garland Hilliard. So I gathered up my high school drawings and headed over to Poe Hall to see Mr. Hilliard. He had a scruffy white beard, ink stained finger nails from his home printing business, and an impressive Southern accent. He intently looked through my portfolio, asked me some questions that I assume came from a final exam, and then awarded me credit for the class. I left thinking that I would not see him again since that was the only engineering graphics requirement in my degree.

**Bob Hagavik & Audie Evans** – In the summer of 1983 I was able to get a job working for Siemens Switchgear Division in Lizard Lick, North Carolina. Bob Hagavik was my supervisor, and Audie Evans was our low-voltage group leader. The first thing they handed me was a stack of marked up blueprints, the original vellum drawings, and an electric eraser. That was pretty much my job that whole summer – correcting drawings. Eventually they had enough confidence in me to let me do some original drawings. I worked there for three years. Bob was the first person I really watched managing a group of people. We had to meet deadlines, and Bob and Audie were masters at making sure we got things done without being too stressed out. Audie also made sure I understood the relationship between what we were doing and what was going on out on the manufacturing floor. I clearly remember a time when we were trying to meet a

deadline, and the guys on the shop floor would not drill a hole until a drawing was updated. Audie took me out to the floor, we drilled the hole where it needed to be, and then we came back and changed the drawing. We met the deadline.

**Joe Clary** – In the fall of 1983 I found myself struggling with my coursework in mechanical engineering. That semester I was taking Engineering Economic Analysis, Differential Equations, Dynamics, and Solid Mechanics. Here it was in the first semester of my junior year, and I had not yet gotten my hands dirty in any class. I started hunting through the University Catalog for other majors. I stumbled on one called Technical Education. I made an appointment to talk with the Department Head, Dr. Joe Clary, and he laid out a plan for me for the Spring 1984 semester. Joe later hired me in the Department of Occupational Education and was a big part mentoring me through my graduate work and early career.

**Bill VanderWall** – One of the courses I took in the Spring of 1984 was Dr. VanderWall's descriptive geometry course. All of the familiar widgets and comfortable mechanical objects were gone. All that was left were points, lines, and planes. It took me a few weeks to feel confident with the material, but it really opened my mind to the possibilities of graphics as a vehicle for problem-solving. I learned quite a few teaching techniques from VanderWall, especially using colored pencils to keep track of different points in space.

**John Freeman** – In the Spring semester of 1985 I took John Freeman's Furniture Graphics course. I learned quite a bit about furniture in that class – which to this day helps when we buy new furniture. Yes, John, I do still look up under a table to see how things are assembled. I also learned a lot about how to organize my in class objectives and lessons – and how not to organize my office. John has also taught me about how to be a compassionate advisor. He always went the extra mile for our advisees to make sure they understood their options.

**Bill Ross** – Bill was the first person to get me involved with computer-aided design. I did an independent study with Bill as part of my undergraduate work, and he mentored me through several different CAD programs. Bill made sure we were, as I remember him always saying, on the “bleeding edge” of technology.

**John Crow** – I don't think I can say enough about what John Crow has done for me. He was my mentor when I did my student teaching and checked my lesson plans to make sure I was on the right track. Today, John is my colleague. Although he retired in 1992, he still teaches two courses each semester at NC State. I can count on him stopping by my office several times each week to have at least a 30 minute conversation about descriptive geometry, visual thinking, religion, marriage, children, the Big House in Lincolnton, or the latest joke he heard.

**Nate Hartman** – Best doctoral student I ever had. We did some amazing curriculum revisions while Nate was at NC State.

**Other Faculty at NC State** – Bob Hammond, Ben Webb, Sue Markley, Gaynelle Gull, Eric Wiebe, Walt Kelly, Brian Matthews, Bill DeLuca, Bob Wenig, Dick Peterson, Jim Haynie, Ed Gerler, Alice Scales, and Aaron Clark. All of these people have in some way contributed to my success.

**And the folks in the EDGD of ASEE** – Mary Sadowski, Frank Croft, Dennis Lieu, Judy Birchman, Bob Chin, Kathy Holliday-Darr, Tim Sexton, Mike Stewart, Pat Connolly, Ron Pare, Ron Barr, Holly Ault, Jim Leach, Nick Bertozzi, Jon Duff, Fritz Meyers, Sheryl Sorby, Barry Crittenden, Norma Veurink, Laverne Abe Harris.

**And of course my family** – When our boys were young, Darlene took care of them when I was in graduate classes and when I went to conferences. She sacrificed quite a bit to make sure I had a chance to develop professionally. She also was a great sounding board when I needed to vent. She is the love of my life, and I am so grateful for her.

So what is the point of all this besides thanking people? The time you give to help someone is precious, and I believe that is one of the reasons we are on this earth. That could just be helping someone work through a professional issue. It could be writing a letter of reference for someone. It could be encouraging someone to be an officer in a professional organization. It could be taking someone with you when you visit an industrial facility. As we get older, I believe it is our responsibility to help develop young leaders. When I was a young child, or even a teenager, I never imagined that I would be faculty at a university. In fact I was extremely shy in elementary school. I never imagined I would travel around the country and the world talking about research and teaching practices. One year ago I never imagined I would be moving to another state to be a department chair.

So let me end by thanking everyone again for this honor. And I also want to end with a challenge. Give a portion of your day to help someone else.