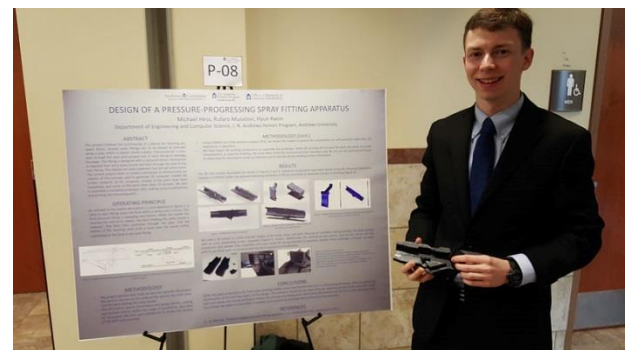


# ECS NEWSLETTER

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The Engineering and Computer Science Department aspires to be a place of choice for engineering and computer science education where dedicated student and faculty grow together to reach their God-given potential for service to society and the church.

# Graduation

## May 2016 | Robert Polski | Mechanical Engineering, Physics Studies & Math Studies

I chose Andrews because I was looking for something different and Andrews, while being an Adventist school, seemed like a great intellectual environment, it had an engineering program, and the people I met here were friendly. I started out in mechanical engineering because I saw an interesting career path with relevant issues. I soon learned that mechanical engineering is a bit like a rigorous "How-It's-Made" episode with math and all. I appreciate the focus on instrumentation and the broad focus on recent technology. My challenges have been keeping patience and organization along with balance in my social life, health, sleep, school, research and work. I've been incredibly blessed by all the opportunities I've had and the possibilities that are ahead of me. More importantly, God has blessed me with the wonderful people that I've met here: professors, friends, and my fiancée. I have applied to and am still waiting to hear from graduate schools for PhD programs in physics or applied physics. From the acceptances I already have, I can say that I'm going to graduate school, though I don't know where yet. I had two research experiences over the summer. The first was at Yale, and the second was this past summer at the University of Michigan. During these experiences I've learned a lot about working with people, preparing presentations, and working with awesome equipment for things like electron microscopy, molecular beam epitaxy (really precise nanocrystal growth), and metal machining.

If I could go back and change one thing I would probably try to be proactive earlier. I would focus on improving the areas that I see lacking or that I want to pursue, instead of complaining about them, try to put more emphasis on organization, and consider doing a student mission year in the first few years. And a tip for current and prospective students: look for ways to get involved; it never hurts to give those things that seem a bit crazy, like doing research over the summer at Yale, a shot.



Congratulations to all graduates! You are ready to accomplish "many wonderful things" in your life. I know this because you have knowledge, skills, and humility before God and man. Whether you advance to graduate schools or work in industry, remember that you are truly exceptional. We will always be eager to hear good news from you! -Dr. Kwon

# Awards & Who's Who

## Department of Engineering & Computer Science Awards for Academic Achievement:



**Joshua Kim** | BS Computing, Computer Science Emphasis, Mathematical Studies, Minor in Religion | Who's Who: Academic Achievement, Computing Excellence Award.



**Bernardo Martinez** | BS Computing, Computer Science Emphasis, and Minor in Engineering & Accounting, Computing Excellence Award.



**Luis Rios** | BS Computing-Computer Science Emphasis, Minor in Architectural Studies and Leadership, Computing Excellence Award.



**Eui Bin You** | BS Computing- Computer Science emphasis | Who's Who: Research with Dr. Summerscales android app to interpret the colors of paper bio sensors, Academic Achievement, Computing Excellence Award.



**Michael Hess** | BSE Mechanical Engineering, Physics Studies, Minor in Mathematics | Who's Who: Academic Achievement- Stryker Challenge 2nd place 2015, Research with Dr. Kwon, Engineering Excellence Award.



**Rufaro Musvosvi** | BSE Mechanical Engineering, Mathematical Studies | Who's Who: Academic Achievement, research with Dr. Kwon, Engineering Excellence Award.



**Christopher Ott** | BSE Electrical & Computer Engineering, Minor in Mathematics, Engineering Excellence Award.



**Robert Polski** | BSE Mechanical Engineering, Mathematical Studies | Who's Who: Academic Achievement, REU at Yale, REU University of Michigan, Research with Dr. Kwon, Engineering Excellence Award.



**Cody Rieger** | BSE Mechanical Engineering, Minor in Mathematics, Engineering Excellence Award.



**Brian Shockey** | BSE Mechanical Engineering, Mathematical Studies, Minor in Religion | Who's Who: Academic Achievement, HyperLoop Challenge Participant, Engineering Excellence Award.



**Jonathan Wheeler** | BSE Electrical & Computer Engineering | Who's Who: Academic Achievement, Leadership through SM, Research for Physics on LIGO, Engineering Excellence Award.

# Alumni Profile

**Katie Parker | Class of 2011**

My majors at Andrews were Chemistry (ACS recognized), Mathematical Studies, and Engineering (mechanical emphasis). I graduated with a B.S. and a B.S.E.; a total of 214 credits. I still think it's cool that I was the first girl to graduate from the ABET accredited engineering program with a mechanical emphasis. My senior design partner, Sandra Prieto, graduated literally right after me as the first female with an electrical emphasis. We still joke about it to this day.



I started working at the family business, Specialty Steel Treating, Inc. in 2002 and continued every summer since then. I started out as a receptionist, then a lab tech assistant, and have been a full time Process Engineer for the last few years. I love my job and my curiosity drives me to learn as much as I can to do my best.

I did not have extra research or internships besides my educational studies and working at the heat treating business. However, I found that what I learned at the shop helped me with my studies and what I learned at Andrews applied heavily to where I worked. It was a win-win.

I received my Masters in Chemical Engineering from Wayne State University in 2013 and the following year I married my husband, Andrew Mejeur, also an engineering graduate from Andrews. I am finishing of my MBA and will graduate from Wayne State again in May 2016.

## Alumni Weekend Invitation:

The Engineering and Computer Science Department, as well as the Andrews University campus, invites you all this coming fall 2016, September 29<sup>th</sup> - October 2<sup>nd</sup>; to join us for Alumni Weekend, as the alumni come together to celebrate our accomplishments and blessings as Andrews graduates .

# Community Outreach: ENGR 485

**ENGR 485 | Justin Shin | Class of 2019**

ENGR 485, an engineering class led by Dr. Hyun Kwon and eight of her engineering students, is made up of mini "Science Art" courses for 7<sup>th</sup> & 8<sup>th</sup> graders at Ruth Murdoch Elementary School, the Adventist elementary school here in Berrien Springs, MI. This popular class recruited 23 RMES students. A couple of the engineering students helping lead out the class, share their experiences with us: "A truly heartwarming experience to be able to teach these middle school kids" Justin Shin, a freshman here at Andrews University describes when asked to summarize the Engineering 485 course. Every Tuesday and Thursday these students go and teach middle school kids about circuits and electronics. The college students encourage the children to explore the world of electronics and circuits and guide them as they create artwork involving LED lights.

As Ashton Fisher says, "I appreciate the kids being interested in science at that age. It's important to keep young people interested in pursuing careers in STEM programs." It's apparent that the mutual bonding growth occurring between these two groups of people really motivates each party in their everyday endeavors. The social interaction between college students and middle school students reminds these college students of their own childhood memories and has brought up nostalgia. "I hadn't even realized that I grew up and was honestly a little sad by how different I have become." Zach Verhelle states. Being around the RMES students places these college students in heartwarming mindsets that motivate them in becoming role models for them.



Jonathan Penrod, an ENGR 485 student, helps one of the RMES students assemble a circuit.

# Hyperloop Challenge

**Phillip Coleman | Class of 2018**

Three months ago, Space-X announced the Hyperloop competition to the University Engineering Community. When the word of the Hyperloop competition came to our department I knew that I had to be part of it somehow. We put a team together which included Jonathan Penrod, Brian Shockey, Nathan Verrill, Michael Hess, Harper Hazen, and Jeremy Tiffany and me. We called ourselves Team "Meherah" meaning haste and speed in Hebrew. After about a month of discussion we finally settled on making a subsystem that was similar to landing gear that is normally found on an airplane, but in our case, would be used in an emergency pod failure. After two long months of work of modeling, our design was accepted and Andrews University was invited to Texas A&M to present our landing gear design, with the likes of MIT, Stanford, Harvard, and Caltech. We flew out on January 28<sup>th</sup> and I was very nervous, but I was more excited that I had the opportunity to represent my university at the biggest engineering competition of the year! The team that I worked with is all that I could have asked for and more. They are smart, organized, and dedicated, but most of all, they are humble. None of this would be possible without them.



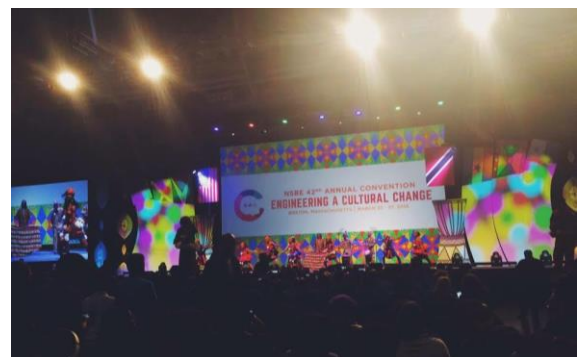
Left to Right: Brian Shockey, Phillip (T.C.) Coleman, Jonathan Penrod, & Nathan Verrill

# National Society of Black Engineers

**Jeffery Emile | Class of 2016**

The National Society of Black Engineers has become and is still growing to be one of, if not the greatest network for black engineers nationwide. While the organization welcomes all races and ethnicities their motto makes it very what their vision is.

They exist "To increase the number of culturally responsible Black engineers who excel academically, succeed professionally, and positively impact the community." The Andrews University chapter has done a great job at being a catalyst for getting engineers, more specifically black engineers' job placement and a strong network of professionals upon graduation from college from Andrews University. We are excited and grateful to attend the annual convention the organization holds for its members at schools all over the United States. At the conventions companies such as Apple, Google, Microsoft, Facebook, and corporations alike come for the sole purpose of providing job and internship opportunities to black engineers, and engineers as a whole.



# New Professor

**Jay Johnson | Starting Fall 2016**

Starting at Andrews University's Department of Engineering & Computer Science in Fall 2016, Dr. Jay Johnson the new professor of engineering, comes to us from Princeton University, Princeton Plasma Physics Laboratory. There, Johnson made a difference by developing a kinetic fluid model to describe kinetic effects on wave generation, propagation, and dissipation in the magnetosphere and applied the kinetic fluid model and 3D hybrid simulations to examine linear and nonlinear mode conversion and transport processes associated with kinetic Alfvén waves at the magnetopause and compared with observation. Another project includes leading the space physics group at PPPL since 2005, growing the group from one person (in 2005) to four through a successful flow of external funding. Along with that, he strategically built the PPPL space physics group to include a full suite of modeling expertise in multi fluid, kinetic-MHD, gyro kinetic, full particle PIC, and finite element wave codes. He also led joint projects with fusion researchers to develop a finite element full wave code that describes waves in space and fusion plasmas and a gyro kinetic model for space applications; as well as advised students and postdocs and taught graduate student & summer intern courses, among much more research. Prior to Princeton he served as a research associate at Massachusetts Institute of Technology and Geophysical Institute at the University of Alaska. He graduated from M.I.T with his PhD in Physics and graduated his undergraduate from University of Colorado with a BA in Physics and Math.



We gladly welcome Dr. Johnson with open arms into his new family in the Engineering and Computer Science Department.

# Student Highlight

**Johnathan Wheeler | Class of 2016**

**Why did you choose Andrews?** I wanted to go to an Adventist University with a strong physics program.

**Majors:** Electrical Engineering, Physics, & Mathematical Studies

**Why did you choose these majors?**

The Bible reveals a God of reason and order, who sets up elegant systems by which we can know more about him. I love the beauty of mathematics, and the way in which physics describes the mechanics of the observable universe. After my year of student missions in Lebanon, I wanted to learn how to apply these to loves in a practical setting, and so I declared an Engineering major to marry my theoretical background with practical studies.



**Blessings and Challenges that have come with your college career:** I met my wife studying Electricity and Magnetism. I had encouraging advisors (Tiffany Summerscales and Gunnar Lovhoiden) who were always available to answer any question I could field them. Dr. Summerscales also went the extra mile to provide international research opportunities in Australia (2012), and in collaboration with a British Gravitational Physics games group (2015 - present).

**Looking into any jobs or grad school after graduation?** I have applied to the following schools: Stanford, Ann Arbor, Urbana-Champaign, UT Austin, Georgia Tech, Purdue; and upon earning a Ph.D. in Communication Systems, I wish to serve as a career missionary internationally.

**Have you had any internship? How were they beneficial?** In June - August of 2012, I did optics research with the gravitational wave group at Australian National University. It gave me a huge head-start on upper division courses by exposing me to the concepts early in my college career. I used the rest of my semesters to gain people-skills by counseling kids at Camp Wakonda.

**If you could go back in time to change one thing about your college career, what would it be?** None. I have had a fulfilling college career and have been blessed with teachers, professors, and advisors since High School who have invested in and mentored me. I have learned that these relationships are what got me where I am today, and I would not have changed a thing.

**Any tips for current & prospective students?** Two tips: First, math is super important. If you want to do well in the hard sciences, you have to be fluent in calculus. Take all the math electives you can, and you will go far. Second, relationships are super important. Don't bring yourself to a point in your college career where you sacrifice a friendship for a class. Balance is important, but friendships get you more jobs than GPAs.



# Alumni & Lecturer

## Daryl Gungadoo | Class of 1996

Having grown in Africa as the son of a missionary, Daryl Gungadoo has a passion for cultural anthropology in relation to technology. He loves to hunt for & develop new technologies that can be of use in the spread of the gospel. He has been a research and development engineer for Adventist World Radio for 20 years.

Daryl studied engineering technology / software engineering at Andrews University & audio engineering at MIT. He is married to Johannie, a molecular biologist, has two children, Anoushka and Noah, and is currently based in London, England. A junior Engineering student, Joshua, Pazvakawambwa, shares his experience with the lecturer.

"On the 16th of February the Engineering and Computer Science department alongside the Religion & Biblical Languages, Visual Art & Design departments co-hosted a Guest Lecture. Daryl Gungadoo, an Alumnus and R & D Engineer of Adventist World Radio (AWR) shared a wide variety of information on a gospel mission oriented career. His presentation unraveled us to a world of innovating technology for gospel missions through the development of sustainable and effective devices that seek to improve the lives of others while also telling the world of Jesus Christ. While obtaining his undergraduate education here at Andrews, Darryl participated in the mission program and interned with AWR sparking his interest in radio engineering at a very young age. Upon completing his studies, he further pursued a software engineering master's program with Andrews & Audio Engineering at MIT and later returned to serve in the mission field with AWR.

Among some of AWR projects showcased, Darryl was mostly excited about #AWR360, an exceptional solution of capturing 360° video in order to tell the story and impact of the gospel reaching the unreached communities in the 10-40 window. This technique is unique in that it gives the viewer a full immersion experience much like with virtual reality and has been an effective means of reporting back to leadership the success of their previous radio distribution work. This form of storytelling was pioneered by Darryl and his team's desire to immerse others in the testimonies of those they were ministering to. The #AWR360 experience effectively reported on how their projects (e.g. the 'GodPod') were synergizing software, hardware, anthropology & theology.

**"Darryl shared that while the remuneration rate in the mission industry wasn't lucrative the satisfaction of this career was engrossed in the service of making the good news of salvation a reality for other people."**

- Joshua, Pazvakawambwa | Class of 2017



The GodPod project has been one of the longer projects the AWR team has worked on. The aim of this project was to create a device that would transmit radio signals in the listener's language using basic electronics components namely micro-signal processors, solar panels, batteries and flash memory. Various versions of the product have been developed over the years with major advances in each edition to suit desired specifications such as use in remote areas lacking electrification and reliable communications networks. Darryl shared that while the remuneration rate in the mission industry wasn't lucrative the satisfaction of this career was engrossed in the service of making the good news of salvation a reality for other people. Other opportunities to attract revenue existed through patenting exceptional innovation #AWR360, and consulting for the other humanitarian organizations such as the UN. While this fact may be a setback for wishing to live lavishly, I resonate well with the saying that "a life of service is more fulfilling than a secured job of climbing the corporate ladder in a fortune 500 organization".

I personally found the lecture series to be insightful and beneficial especially for those who are contemplating on the viability of becoming missionaries in our career fields. The Lord is calling young, diverse people including those of technically oriented professions such as engineering and computer science to the spread the everlasting gospel through modern channels such as the digital screen, internet and radio. If the Lord is calling you to serve Him, I challenge you to prayerfully consider offering your skills and talents to innovate light to the world. Daryl Gungadoo is an ambassador of the Engineering and Computer Science Department's Mission Statement that "aspires to be a place of choice for engineering and computer science education where dedicated students and faculty grow together to reach their God-given potential for service to society and the church."

# Stryker Challenge 2016

Kalamazoo, MI | 3/31/16 - 4/1/16

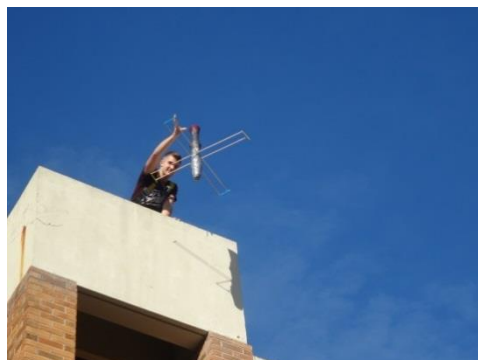
Seven teams participated: two from Notre Dame, two from University of Michigan, one from Purdue, one from Western Michigan University, and one from the Michigan Colleges Alliance (MCA). Andrews University's Department of Engineering and Computer Science's very own Patryk Czajkowski was part of the MCA team that placed fourth overall, showing once again that our students compare favorably with the larger engineering programs in our area. The MCA team consisted of Patryk Czajkowski (Andrews), Shurjo Maitra (Calvin), Ross Newland (Hope), Melisa Ramirez (UDM). The Challenge was to design a remotely controlled vehicle that could pick up victims (small Lego people) using a magnet. The situation was a simulated gas leak in downtown Kalamazoo. The competition consisted of two 20 minute halves with a 20 minute half time. There were three separate areas to pick up victims from. The attached course picture shows the teams' pit areas closest to the camera and a park on the right, a hospital area in the middle, and downtown stores area on the left. Each area was accessible only through an obstacle path. Some victims were lying on the ground; others were high up on roofs while others were hidden behind doors only opened in response to a prearranged signal (either blinking LED or a sound signal at the appropriate frequency, or by pressing a switch). Points were awarded per victims brought back to the pit area by the vehicle according to the difficulty in accessing them. If the vehicle broke down it could be brought back to the pit area for repair by the Stryker mentor, but no points were awarded for victims on the vehicle at that time. MCA placed fourth in the technical challenge and fourth in the overall competition. Notre Dame's teams and Western Michigan took the first three positions.



# Egg Drop Competition

Trinity Geary | Class of 2019

Trinity is one of the winners of the egg drop 2015! She made a distinctive egg drop vehicle that swirled when it fell. This "swirl" greatly reduced speed of falling therefore rescuing the egg. Our annual egg drop is not only a fun activity on a nice autumn day but also a great venue to show off one's creativity and craftsmanship. It is open for all ECS students and for public. I cannot wait to see next year's clever and ingenious egg drop vehicles! -Hyun Kwon, PhD





## Internships & REU's | Summer 2015



**Brandon Injeti** | *Siemens | Malaysia (Healthcare Sector)*- The Internship consisted of working on Biochemistry Analyzers (Urine & Blood Samplers) and imaging systems (MRI, CT, X-Ray, ect.); working comprised of assisting the million dollar installation process and system optimization.



**Phillip "T.C." Coleman** | *NAE* | The National Academy of Engineering Program Office- The internship was made up of the interns completing literature reviews for three ongoing projects.



**Taylor Halle** | *Tristar* | The internship was characterized with working the senior engineer to make manufacturing processes more efficient.



**Thomas Winnard** | *Klockner Pentaplast* | Rural Retreat, Virginia- The internship required him to design solutions (by hand, without access to computer modelling software), work with people from backgrounds much different from mine, and optimize workspaces by utilizing 5S methods.



**Jonathan Wheeler** | *REU Australian National University* | He characterized response of an optical fiber Bragg grating Lorenzian filter, and presented findings and feedback-control applications for gravitational wave research and quantum cryptography labs on campus.



**Luis Rios** | *Cisco Systems* | Software Engineering Intern- Assisted in systems testing and network adaptation for Cisco products & solution architectures. Validated functionality and connectivity of new & reassembled test beds for Connected Transportation Systems (CTS) in Cisco IOS. Studied for Cisco CCNA Routing & Switching Certification.



**Robert Polski** | *REU U of M Center for Photonic and Multiscale Nanomaterials* | Nucleation and growth of indium nanoparticles on silicon- By changing the surface structure we can make materials that are more sensitive to light and more powerful for use as solar cells and sensors. *REU Yale*

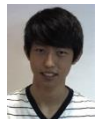
## Research | Summer 2015



**Bernardo Martinez** | *Architectural Viz with Oculus Rift* | The research deals with implementing a framework to import files from Autodesk Revit to Unreal4. The oculus rift is a virtual reality headset. He used it to give a more in depth experience of the buildings. By wearing the oculus Bernardo was able to immerse into the 3d world and look at depth of objects.



**Jonathan Wheeler** | *Evaluating the Efficacy of Black Hole Pong in Inspiring Interest in Gravitational Wave Physics in High School Students* |



**Eui Bin You** | *Mobile Application for Biosensor Colorimetric Analysis* | Eric developed an Android app that allows the user take a picture of a biosensor (developed by Dr. Kwon) and then, using machine learning to analyze the color of the sensor, decides whether the picture shows a positive or negative result.



**Zach Verhelle** | *Electrochemoluminescence Microfluidic Sensor* | Zach is working with Dr. Kwon to develop an electrochemoluminescence paper based microfluidic sensor to detect the concentration of, for example, glucose, in a solution.



**Christa Spieth** | *Evaluation of anodized aluminum for potential use as interposer in test socket industry* | She worked with Dr. Boon-Chai Ng to subject anodized aluminum samples to repeated thermal cycling to ensure the difference in expansion rates of the oxide layer and metal did not cause surface cracks in the samples.



**Will Allen** | *Evaluation of anodized aluminum for potential use as interposer in test socket industry* | He also worked with Dr. Boon-Chai Ng to anodize aluminum, which produces aluminum oxide, to see if aluminum oxide could be used as an interposer in the test socket industry.

# Game Night

March 26<sup>th</sup>, 2016

In collaboration with the seniors, the upcoming event planners for next year put on a game night for the department on March 26<sup>th</sup>. One of the event planners for next year, Ester Carrasco, shared her experience at the game night, "As we near the end of the semester and after a long week of classes, we look forward to some fun and fellowship with peers outside the academic environment. This year's engineering game night turned out to be a success. It was a great way to engage in something other than schoolwork and have fun with friends. After closing the Sabbath, we engaged in a variety of games in which we were all able to participate while enjoying lots of snacks desserts and pizza! Throughout the night there were some draws that were done and the winners got prizes such as portable speaker, mugs and more. It was truly an enjoyable experience for making new memories and getting to know other students. We hope you join us in the upcoming engineering department events for more fellowship and delicious food!"



Ester Carrasco | Class of 2019

# Student Highlight

**Mateusz Kroczyk | Class of 2019**



**Hometown:** Bolingbrook, Illinois

**High School:** Bolingbrook High School

**Major:** Electrical Engineering

**Why did you choose Andrews?** I wanted to go to an Adventist college, but there were few that offered engineering as a major, so of the two that did, Andrews was closer to home.

**Why did you choose this major?** I enjoy creating things and electricity has always fascinated me with all the things you can do with it.

**What are some blessings and challenges that have come with your freshman year?** My freshman year has brought me many new friends and great professors. I have been able to both learn and get closer to God simultaneously. I think the greatest challenge has been understanding professors with an accent when they go through material quickly.

**How did the Dare to Dream Scholarship enhance your experience here at Andrews?** The Dare to Dream Scholarship has allowed me to focus on my studies so that I can put my full attention to them.

# Engineers Without Borders

One of the most exciting aspects of engineering and computer science is the fact that the technical skills that are fostered in the classroom can be applied to solve real world problems. Many of the issues that cripple communities around the world can be overcome through the hands-on application of the principles that are taught in our own Engineering & Computer Science Department. Unfortunately, it can be difficult to translate book knowledge into meaningful action, but this is a trend that Engineers Without Borders USA (EWB-USA) seeks to counteract by providing opportunities for people to use their unique skills to empower communities and engineer a better world.

Contact Us: [andrewsewb@gmail.com](mailto:andrewsewb@gmail.com)  
<https://www.facebook.com/AndrewsUniversityEWB>



Although many of the students and faculty here at Andrews are brand new to the EWB-USA organization, we are excited about the future of our newly-formed student chapter. Since the chapter was born in 2014, student involvement has grown from just two active members to over a dozen committed members. This past school year, our chapter has spent many hours drafting chapter documentation, researching EWB-USA, and networking with other professional and student chapter members. In February, Andrews University's EWB-USA chapter was invited to participate in the Premier AUSA Service Gala where we were able to raise awareness on campus about the Engineers Without Borders vision.

**"The foundation has been laid and we believe that we are ready to take on our first community development project, but we continue to welcome the support of professionals, alumni, faculty, and students with the hope of turning this vision of an active EWB-USA chapter into a reality."**

"Going to the EWB conference this last week made me realize the need for engineers in poorer communities and exposed me to people who have world changing ideas that we can contribute to. I connected with organizers and other students with the same mindset, and this experience has encouraged me to strive to work on meaningful projects that we can do through our school."

- **Andrew Gagiu**, Electrical & Computer Engineering Emphasis, Class of 2019

"For the longest time, I thought my path in life was to get involved with international aid and development. Although the Engineers Without Borders conference did not change that, it did change my perspective on how to help a community. Instead of merely serving my own altruistic motives, I now see the most important aspect of effective service is building a relationship with the community we desire to help."

- **Phillip "TC" Coleman**, Mechanical Engineering Emphasis, Class of 2018

"The EWB International Summit placed a lot of emphasis on the importance of being thoughtful and compassionate in our interactions with people, communities, and the planet. I was repeatedly reminded that my desire to help people must be born out of a sincere motive based in love and humility. As Andrews University students and followers of Christ, we have a responsibility to share our skills and resources with those who do not have the same opportunities, but we must also understand that interpersonal relationships are the foundation on which sustainable changes must be built."

- **Nathan Verrill**, Electrical Engineering Emphasis, Class of 2017

"If you have come to help me, you are wasting your time. If you have come because your liberation is bound up with mine, then let us work together." *Words attributed to Lilla Watson, Aboriginal elder, activist and educator from Queensland, Australia, quoted by EWB-USA advisor and*

*International Summit presenter, Hunter Lovins*



# Message from the Chair

Greetings! I'd like to share all the wonderful achievements that our department has accomplished in the 2016 spring semester. Our department has grown up to 40% in the past 4 years which led to moving the engineering program to Harrigan Hall to create space for a bigger and greater program. Throughout our time of transition we hope we can grow into a more widely recognized and truly excellent department. As chair, I always contemplate over the question- "what will take us from where we are to the next level?" I invite all the faculty, staff, students, parents, alumni, and supporters to join me on this adventure. Our department is very fortunate to have such wonderful people in this quest and I am forever grateful to you all. Do not hesitate to give us your advice, wisdom, and support. I'm thankful for the marvelous journeys we've encountered so far, and thrilled for the future journeys from now henceforth.

Blessings to all!



**Hyun J. Kwon, Ph. D**

**Professor & Chair of**

**Engineering and Computer Science**

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- Chemical Engineering Emphasis \*New
- Mechanical Engineering Emphasis

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- BS: Computer Science \*New
- BS: Computing: Software Systems Emphasis
- BS: Computing: Computer Science Emphasis

Contact us for more information

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