ASEE North Central Section Conference – Grand Valley State University (March 23, 2019 @ 1:45-3:00pm)

Engineering Education and Industry: Finding the Balance between Practice and Theory

Joint Panel: Leveraging Student Insight, Energy, and Experience to Build an Engineering Co-op Program

Basic Information

Title

Joint Panel: Leveraging Student Insight, Energy, and Experience to Build an Engineering Co-op Program

Type

Panel of Invited Speakers

Description

The ability to leverage student insight, energy, and experience is helpful in the development of an engineering co-op program. Student feedback and experience is an invaluable asset to the early development and continuous improvement process. This session will be led by high-achieving students who will provide input on the following topics:

- Recruiting and retaining engineering talent to build a strong employment pipeline
- Development of an engineering co-op program
- Best practices for structuring co-op rotations and improving the program and full-time conversion
- Tips for instilling strongly aligned student and employer goals
- Role of co-op experience in shaping your early career

Further discussion will involve the establishment of key partnership benefits, with advantages associated with the employer and student interests. Industry training, practical exposure, project experience, and professional networking benefit student employees. A strong talent pipeline with improved efficiency, innovative ideas, and relief from an increased workload are valuable benefits for the employers. This is an interactive session. Speakers will give a brief introduction, followed by an opportunity for attendees to ask questions and discuss topics of interest in a group setting.

Estimated Head Count

15-25

Session Interests

Academia-Industry Connections, Broadening Participation in Engineering and Engineering Technology, and New Members

Time

Saturday, March 23

@ 1:45 PM - 3:00 PM

Location

KEN building (room no. – TBD)

Guests



Mr. Jacob Colling Mechanical Engineering B.S.E. Candidate – August 2020 Co-op Company: Koops, Inc., Zeeland, MI

Bio

Jacob Colling is a 4th year mechanical engineering student at Grand Valley State University. He is currently in the process of completing his second engineering co-op rotation at Koops Incorporated, where he works on the design of custom automation equipment as a part of their mechanical engineering team. Prior to his position at Koops, Jacob worked for two summers as a laboratory assistant in the Intelligent Systems and Controls Laboratory at Michigan Technological University. He has also worked as a volunteer student assistant in the Biomechanics and Motor Performance Laboratory at the Cook-DeVos Center for Health Sciences. He is from Houghton, Michigan and enjoys running, reading, and hiking in his spare time.

Mr. Dongyao (Don) Lin

Electrical Engineering (Business Minor)

B.S.E. Candidate - August 2019

Co-op Company: EBW Electronics, Holland, MI

Bio



Ms. Taylor Rieckhoff
Product Design & Manufacturing Engineering – B.S.E.
Engineering (Manufacturing Operations Emphasis) –
M.S.E.

B.S.E. & M.S.E. Candidate – August 2019

Co-op Company: Dart Container Corporation, Mason,

ΜI

Bio

Taylor Rieckhoff is a graduate student in the articulated Master's program with the projection to graduate in August 2019. Upon graduation, she will work full time for Dart Container Corporation where she completed her co-op rotations. Her drive for innovation and helping others has propelled her through her work, which has resulted in numerous medical devices that improve patient care. Additionally, she was a finalist with a team of engineering students for the NASA Micro-g NeXT challenge where she worked with astronauts at the Neutral Buoyancy Lab in Houston, TX to test a prototype they manufactured. Taylor has also been a lead designer for the Halloween Heroes event hosted by Mary Free Bed Rehabilitation Hospital in which costumes are built for children in wheelchairs. As a graduate assistant, she has been developing a mentoring program for female, K-12 students interested in STEM. Encouraging young girls to pursue STEM as a field of study or career is a deep passion of Taylor's that she plans to continue throughout her time as an engineer.



Ms. Allison Rogutich
Computer Engineering – B.S.E
Engineering (Biomedical Engineering Emphasis) – M.S.E.
B.S.E. & M.S.E. Degree Recipient – August 2018
Co-op Company: Stryker Corporation, Kalamazoo, MI

Bio:

During her time at Grand Valley, she found a niche in Embedded Software Development through her classes and co-op experiences. At Stryker, she worked as a Computer Engineering intern in Advanced Quality Engineering and New Product Development. During her Master's thesis, she explored new signal processing techniques applied to EEG in order to identify the seizure onset zone of epilepsy patients. Currently, she works at the Stryker Corporation within their Neurosurgical Division as a Software R&D Engineer.



Mr. Jacob Stephens
Product Design & Manufacturing Engineering – B.S.E.
Engineering (Manufacturing Operations Emphasis) – M.S.E.
B.S.E. & M.S.E. Candidate – August 2019
Co-op Company: Parasol Medical, LLC, Allendale, MI

Bio

Jake Stephens is a graduate engineering student and will graduate in August with a master's in Manufacturing Operations. His passion for improving the lives of people drove him into engineering and is evident in his work. He works with Mary Free Bed Rehabilitation hospital each October to organize and run their Halloween Heroes event, an event where they build custom Halloween costumes for children with wheelchairs. He has worked on several joint projects with leading medical professionals to develop lifesaving medical devices that are currently being patented and licensed. Jake has consulted with local hospitals to streamline equipment and processes in their facilities. Jake and a team of engineers were finalists in the NASA MicrogNext Challenge. They develop a sample collecting device and presented their design at Johnson Space Center. They tested their device with NASA astronauts in the Neutral Buoyancy Lab in Houston, TX. He works at Parasol Medical, a premier developer of specialty medical devices. Parasol makes innovative products that redefine healthcare with technology, simplicity, and dependability. We're focused on making the lives of clinicians easier and improving patient outcomes throughout the healthcare market.



Mr. Jordan Vanderham
Product Design & Manufacturing Engineering (Business Minor)
B.S.E. Recipient – August 2018
Co-op Company: DISHER, Zeeland, MI

Rio

Jordan Vanderham has committed himself to make a positive difference through his work and companies. He founded Orindi Ventures where they designed, patented and are now commercializing a cold endurance mask which helps asthmatics and industrial workers thrive in cold environments. To raise capital he pitched his company in 32 International, national, and state competitions earning a place in front of The Shark Daymond John and Marcus Lemonis. Jordan has worked on medical devices that deliver life giving therapy, solar arrays

that gaze up at the sun, and robots that spark one's curiosity. Wear a smile and never stop challenging the norm. Jordan is excited for opportunities with people and passionate projects. Please reach out if you would like to connect!



Mr. Noe Villanueva Electrical Engineering B.S.E. Candidate – August 2019

Co-op Company: Fleetwood Group, Inc., Holland, MI

Rio

Noe Villanueva is an Electrical Engineering, B.S.E. student at the GVSU. His coop employers were Fleetwood Group, Electronics Division. His interests include Embedded Systems, PCB/Electronic Hardware Design, RF systems. In his free time, he likes Music (drums/percussions), Kayaking, Outdoors, his Pug.

Mr. David Whitters Computer Engineering

B.S.E. Recipient – August 2018

Co-op Company: Gentex Corporation, Zeeland, MI

Bio

Moderators

Dr. Anu Aggarwal

Dr. Nicholas Baine