## Graduate Program in **Electrical and Computer Engineering** January 20, 2021



\*\*LEHIGH UNIVERSITY | Electrical and Computer Engineering

#### Please note

- We are recording this webinar.
- If you prefer not to be recorded, please turn off your camera.

- Please feel free to ask questions in the chat.
- We will have open questions at the end too.

# Today's Students/Alumni Panel



Andrew Charway 2<sup>nd</sup> Year PhD Student



Dan Fay 1<sup>st</sup> Year MS Student



Sudeep Khanal (PhD'16)
Sr. Process Engineer at SLD Laser



Nicholas LaRosa 1<sup>st</sup> Year MS Student



Roland Nowak

1st Year MS Student

# **About Lehigh University**







- Located in Pennsylvania's beautiful Lehigh Valley, ~1,600 acres Campus;
- Ranked 49 in US News College Ranking. 4,900 Undergraduates, 2100 Graduate students;
- Five colleges: Art & Science, Business, Education, Engineering, College of Health

## **Rossin College of Engineering**



2019 NSF Career Award Winners

#### **A Snap Shot**

- 140 tenure track faculty in 8 academic departments
- 2,200 undergraduates, 850 graduate students
- The Rossin College generates >50% of Lehigh's Ph.D. graduates, journal publications, and research expenditures.
- 30% of current engineering faculty members are NSF CAREER Award recipients
- 31% of Lehigh engineering students are female (versus the 18% national average)

#### **Department of ECE**

- Lehigh's Electrical Engineering program is one of the first in the U.S., dates back to 1890's
- 21 T&T faculty members: 8 IEEE/CAE
   Fellows, 7 NSF Career winners, 1 YIP
   + 1 PECASE + 3 DLs
- 5 focus areas: Photonics & Circuits,
   SP & Comm, Electrical Power,
   CompE, Bioelectronics.
- ~270 undergraduate students
- ~85 Graduate students
- Excellent facilities and equipment

ECE Dept resides in Packard Laboratory built in 1929



## **Graduate degrees in ECE**

- PhD in EE or CompE
  - Total of 48 credit hours after a MS
  - Total of 72 credit hours after a BS
- MS in EE, CompE, Photonics, or Machine Learning
  - Coursework (30 Credit hours)
  - Thesis or independent study optional
- MEng in EE or CompE
  - Coursework (30 Credit hours)
  - Independent study optional









#### **Graduate Admissions**

- Deadline for consideration of financial support: Jan. 15.
- Final deadline for fall admission: Jul. 15.
- GRE is not required for 2021 admission
- App fee waivers available; email: rls304@lehigh.edu

# For international students: Minimum TOEFL Reading: 20 Listening: 15 Speaking: 20 Writing: 20 COMPOSITE: 79 Minimum IELTS Reading: 6.5 Listening: 6.0 Speaking: 6.5 Writing: 6.0 OVERALL: 6.5

## PhD Student support

#### First-year support

- Presidential Fellowships
- University Fellowships
- Rossin Teaching Fellowships

#### Subsequent support

- Research Assistantships
- Teaching Assistantships
- Department Fellowships



#### Research activities



**Bioelectronics** 



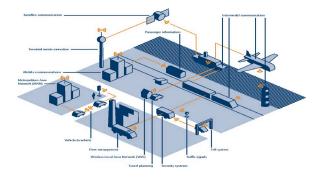
**Computer Engineering** 



Machine Learning and AI



**Electric Power and Energy** 



Cyber Physical Systems and Communications



Semiconductors and Photonics

## **Faculty Profiles**

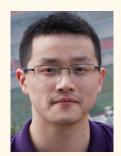
#### **Bioelectronics/Biophotonics**



Prof. **Berdichevsky** 



Prof. Tatic-Lucic



Prof. Zhang (courtesy appointment)



#### **Electric Power & Energy**



Prof. Kishore



Prof. Norian



Prof. Liu



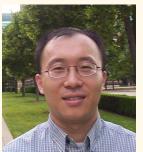
# **Computer Engineering**



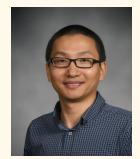
Prof. Cutitaru



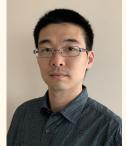
Prof. Guo



Prof. Yan



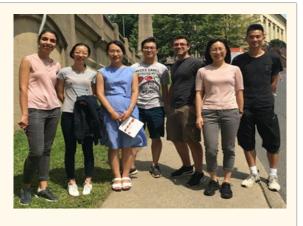
Prof. Wen

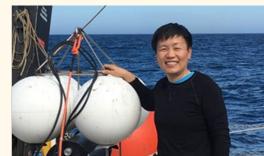


Prof. Yin



Prof. Zheng





Rosa Zheng@Ocean Experiment

## **Machine Learning & Communications**



Prof. Blum



Prof. Li



Prof. Venkitasubramaniam



Prof. Xiao (ECE Chair)





## **Electronics & Photonics**



Prof. Frey



**Prof. Hatalis** 

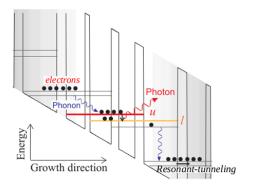


Prof. Kumar

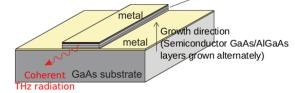


Prof. Wierer

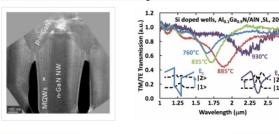
Superlattice gain medium due to intersubband transitions



Terahertz electromagnetic cavity using metallic confinement GaAs/AlGaAs superlattice layers for terahertz emission

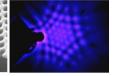


Website: jwierer.com









III-nitride materials, devices, and physics

## Where do our students go?











THALES

















# **Questions?**



University Career Services Average BS Starting Salary

Discipline	Class of 2019	Rank	Class of 2018	Rank
Bioengineering	\$59,220	10	\$58.364	9
Chemical Engineering	\$66,892	6	\$70,638	3
Civil Engineering	\$64,351	8	\$64,932	7
Computer Engineering	\$72,154	3	\$71,355	2
Computer Science	\$84,162	1	\$87,077	1
Electrical Engineering	\$77,000	2	\$68,049	4
Environmental Engineering	\$64,500	7	\$62,750	8
Industrial & Systems Engineering	\$70,091	4	\$66,080	6
Mechanical Engineering	\$68,309	5	\$67,700	5
Materials Science & Engineering	\$65,929	9	\$56,500	10

https://www1.lehigh.edu/admissions/job-placement-success-postgrad-education

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