

Intl Mobility with USA Universities

September 2020- February 2021

ETSETB call for mobility

Prof. Eduard Alarcón, USA liaison ETSETB, former Associate Dean Intl ETSETB, CFIS adjunt Dean.

Prof. Jose Antonio Lázaro, Assoc. Dean Intl



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

Campus d'Excel·lència Internacional





- Research-oriented Master's thesis
- Research-oriented Bachelor's thesis
 - J1 visiting scholar visa
 - Student has to cover living expenses, but TA / RA possible.
- No courses
 - Would require expensive tuition
 - Would require special visa
- No MoU: acceptance on a one-by-one ahdoc basis



Requisites



- Academic file
- Research experience
- Genuine willingness to continue a research path



- Northeastern University –Boston–
 - signal processing for underwater communications (M. Stojanovic)
 - biomedical image/video processing (D. Brooks)
 - energy-harvesting wireless sensor networks (K. Chowdhury)
- Massachusetts Institute of Technology – MIT Cambridge
 - Computer graphics and massive-data distributed image processing (A. Torralba)
 - Complex aerospace systems (E. Crawley)
 - Optoelectronic chips (Rajeev Ram)
- UMASS, Boston
 - Electromagnetism, photonics, radar (S. Frasier, P: Siqueira)



Northeastern University



Massachusetts
Institute of
Technology





- Georgia Tech, Atlanta
 - 5G Thz, spacenets, SDN (I. Akyildiz)
 - WNoC, AI/ML accelerators (both ECE/CS) (T. Krishna)
- Poly Brooklyn, NY
 - Power conversion for Energy systems (D. Czarkowski)
- New Jersey Institute of Technology
 - Bioengineering, wet lab-on-chip (R. Perez-Castillejos)
- Harvard University (Harvard Medical School, Neurology dept)
 - Neuromuscular disorders, physiological monitoring, system identification. (Benjamin Sanchez)





- University of Illinois Urbana-Champaign
 - Wireless network-on-chip for massive-core computer architecture (J. Torrellas)
- Intel corp, Santa Clara, CA
 - Internet of Video Things (Y.K. Chen)
- Los Alamos National Laboratory, NM
 - Metasurfaces for Arbitrary Control of Electromagnetic THz Waves (Hou-Tong Chen)
- NASA, Washington DC (R. Juanola)
 - Goddard Space Flight Center, Washington DC





- University California Berkeley
 - Brain-like computer processors (J. Rabaey)
- Texas A&M
 - complex aerospace systems, nanosats swarms (D. Selva)
 - Bioastronautics, spacesuits (A.Díaz-Artiles)
- Northeastern Univ, Boston
 - Graphene Thz wireless networks and Neural Optogenetics (JM Jornet)
- University of Nebraska
 - biological molecular communication networks (M. Pierobon)





- University of Southern California
 - image processing ([A. Ortega](#))



- Purdue University
 - image processing ([E. Delp](#))

- UC Davis
 - on-chip wireless ([J. Sebastián](#))



- Rochester Institute of Technology (Rochester, NY):
 - wireless data centers ([Amlan Ganguly](#))



- IBM TJ Watson Research center, Yorktownheights, NY
 - “Cognitive AI” ([Chai Wah Wu](#))





- Princeton University
 - AI/ML IoT co-processors (Naveen Verma)
- Mississippi State University
 - Wireless communications, software radio, digital signal processing (Vuk Marojevic)
- Google, Mountain View
 - AI chips for data servers and IoT





Balcells program

- University of Colorado, Boulder (bio-IT)
- University of Colorado, Colorado Springs (open)
- University of California Irvine (all, bio-centric)

- Illinois Institute of Technology, Chicago



Contact hours



- Prof. Eduard Alarcón
- C4 – 105 C. Nord UPC
- eduard.alarcon@upc.edu
- Office hours:
 - Thursday Nov 28th 15h-19h



Plan the meeting



- Why USA?
- Why research? Forward-looking research plans.
- Uniqueness in your academic file beyond the apparent
- Research topic interest:
 - Background experience
 - Future interests
 - Focus!