

# Intl Mobility with USA Universities

## September 2018- February 2019

ETSETB – CFIS joint call

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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
  - biomedical image/video processing
  - energy-harvesting wireless sensor networks



Northeastern University

- Massachusetts Institute of Technology – MIT Cambridge
  - Computer graphics and massive-data distributed image processing
  - Complex aerospace systems
  - Optoelectronic chips
  - IoT
- UMASS, Boston
  - Electromagnetism, photonics, radar



- Georgia Tech, Atlanta
  - NoC, WNoC, accelerators (both ECE/CS)
- Poly Brooklyn, NY
  - Power conversion for Energy systems
- New Jersey Institute of Technology
  - Bioengineering, wet lab-on-chip
- Harvard University (Harvard Medical School, Neurology dept)
  - Neuromuscular disorders, physiological monitoring, system identification.



- University of Illinois Urbana-Champaign
  - Wireless network-on-chip for massive-core computer architecture
- Intel corp, Santa Clara, CA
  - Internet of Video Things
- Los Alamos National Laboratory, NM
  - Metasurfaces for Arbitrary Control of Electromagnetic THz Waves
- NASA, Washington DC
  - Goddard Space Flight Center, Washington DC



- University California Berkeley
  - Brain-like computer processors
- Cornell University, Ithaca
  - complex aerospace systems, nanosats swarms
  - Bioastronautics, spacesuits
- State University New York, SUNY Buffalo (AirForce)
  - Graphene Thz wireless networks and Neural Optogenetic
- University of Nebraska
  - biological molecular communication networks



Cornell University

University at Buffalo  
*The State University of New York*UNIVERSITY OF  
**Nebraska**  
Lincoln

- University of Southern California
  - image processing



- Purdue University
  - image processing

- UC Davis
  - on-chip wireless



- Rochester Institute of Technology (Rochester, NY):
  - wireless data centers



- IBM TJ Watson Research center, Newyork heights, NY
  - “Cognitive”





## 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

- Prof. Eduard Alarcón
- C4 – 105 C. Nord UPC
- [eduard.alarcon@upc.edu](mailto:eduard.alarcon@upc.edu)
- Office hours:
  - Mon Dec 4th 10h-14h
  - Mon Dec 11th 10h-14h

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