

Intl Mobility with USA Universities

September 2023- February 2024

ETSETB call for mobility

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

Prof. Israel Martín, Assoc. Dean Intl

Araceli Ortiz, Mobility admin head

Eva Salvador, Institutional Mobility Office



**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. Erdogmuz)
 - energy-harvesting wireless sensor networks (K. Chowdhury)
 - THz wireless networks (J.M Jornet)
 - ML Computer vision (O. Camps)
 - Signal processing (P. Closas)
- 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

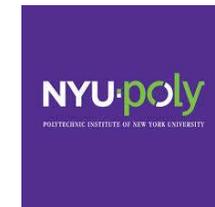


Massachusetts
Institute of
Technology





- Georgia Tech, Atlanta
 - NoCs for AI/ML accelerators (both ECE/CS) (T. Krishna)
- Poly Brooklyn, NY
 - Power conversion for Energy systems (D. Czarkowski)
- The University of Utah, Salt Lake City
 - Neuromuscular disorders, physiological monitoring, system identification. (Benjamin Sanchez)





- University of Illinois Urbana-Champaign
 - Wireless network-on-chip for massive-core computer architecture (J. Torrellas)
- Los Alamos National Laboratory, NM
 - Metasurfaces for Arbitrary Control of Electromagnetic THz Waves (Hou-Tong Chen)
- NASA, Washington DC (Iban Ibañez)
 - Goddard Space Flight Center, Washington DC





- Texas A&M
 - complex aerospace systems, nanosats swarms (D. Selva)
 - Bioastronautics, spacesuits (A.Díaz-Artiles)
- 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)





- Princeton University
 - AI/ML IoT co-processors (Naveen Verma)
- Mississippi State University
 - Wireless communications, software radio, digital signal processing (Vuk Marojevic)





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 – 104 C. Nord UPC
 - eduard.alarcon@upc.edu
 - Office hours: will be announced
- Meetings in late January



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!

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Best practices to deal with admin and embassy



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Plan the Embassy meeting



- J1 visiting scholar is the natural option for VISA
 - It does apply for you as research students, also to PhD and faculties
- J1 visa *paperwork* needed
 - An invitation letter from the host professor.
 - *This is the only formal document you need from the host for the whole admin process*
 - A DS2019 document.
 - *Usually sent by the Intl Students office at the host institution, the host faculty would usually bridge you to an admin contact there.*
- J1 visa *timeline* from the host institution
 - The Invitation letter is as immediate as professors react to their agenda, since a pdf suffices
 - You need to bring the original DS2019 to the embassy. It is recommended to allocate 1 week for the first interaction, two weeks for processing and 1 week for airfare mail.



At the embassy



- How to address the short conversation with the embassy officer.
 - Common sense, yet:
 - It is not a work recruitment interview.
 - *Don't overdescribe yourself. Just the invitation letter from a prestigious university usually makes the work.*
 - Once they realize you are a highly qualified student pursuing research in a prestigious sci-tech College, they will probably ask about the topic you are addressing:
 - *Prudence here: don't overtalk hightech, don't overtalk applications. It is recommended you emphasize the academic theoretical aspects of your research stay.*
- A practical –yet crucial- tip, verbatim from their webpage
 - No backpack allowed in, no lockers in building. Bring only a folder with the paperwork.
- Usually admission, if it occurs, is immediate, allocate a week to receive your Passport back.



From the approved visa on



- Trigger the rest of intendance for your stay:
 - confirm flight, secure housing.
- Initial engagement with the host professor on research topics, ask for recommended research paper readings.
- Mid-term future: 2-year rule might apply in the future when receiving funding from a public institution at country of origin.
 - Still unclear for MOBINT, but risk is low.
 - 2-year rule doesn't impact students willing to continue a graduate program under F1 visa after the first visit. It would to those pursuing a H1 for job after BSc (a small subset). However, in most cases a "letter of no objection" from the company by the Spanish embassy in Washington usually suffices to waive such 2-year rule.