

**CIVIL ENGINEERING STUDENTS' SOCIETY NEPAL**  
**TRIBHUVAN UNIVERSITY, INSTITUTE OF ENGINEERING, PULCHOWK CAMPUS**

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# **STUDY ABROAD: JOURNEY FROM PULCHOWK CAMPUS TO USA**

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**ASSOCIATE VICE PRESIDENT FOR RESEARCH AND SPONSORED PROJECTS**  
**PROFESSOR OF CIVIL AND ENVIRONMENTAL ENGINEERING**  
**CALIFORNIA STATE UNIVERSITY, FULLERTON**

# CONTENTS OF THIS PRESENTATION

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- My journey to USA
- What is study abroad and why is it important
- Qualifications needed
- About required tests – GRE/ TOEFL
- Scholarships/Assistantship/Fellowship (e.g. Full Bright, University-based)
- Application Procedure
- Pros and Cons of studying abroad
- Difference between studying abroad and in Nepal
- Few useful tips to elevate funded graduate study opportunities



# ABOUT THE PRESENTER



**1984-1986**

**Intermediate of Engineering**

**1987~1992**

**Bachelor's in Engineering**

**1992-2004**

**Transportation Engineer, Department of Roads**

# ABOUT THE PRESENTER



**2006-2012**

**Assistant Professor**

**2012-2015**

**Associate Professor**

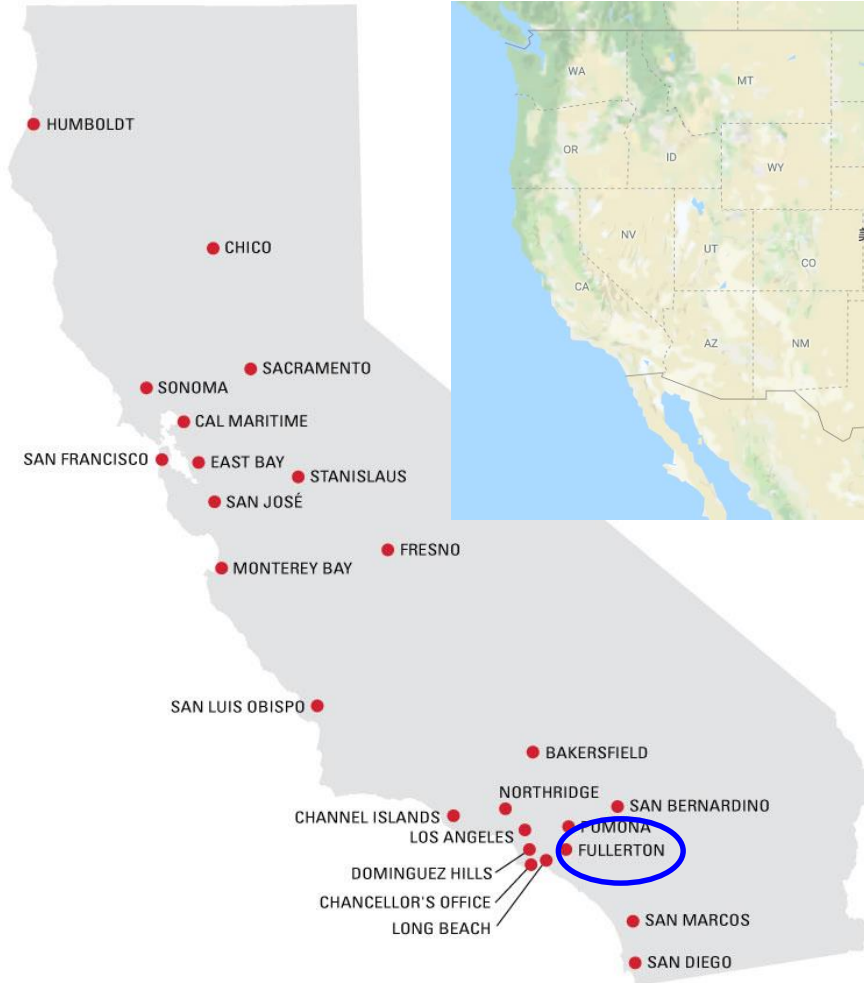
**2015-**

**Professor**

**2019-**

**Associate Vice President**

# CALIFORNIA STATE UNIVERSITY



## GRADUATE STUDIES

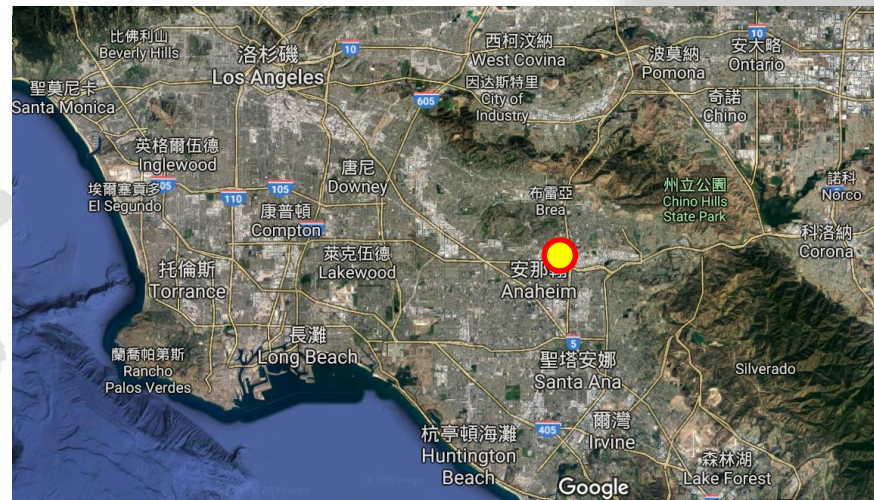
- In fall 2019, the CSU enrolled 51,763 postbaccalaureate/graduate students.
- 19,545 master's degrees were awarded in 2018-19.
- Doctor of Audiology, Doctor of Education, Doctor of Nursing, Doctor of Philosophy and Doctor of Physical Therapy programs serve more than 2,226 doctoral students from diverse backgrounds, preparing them for top leadership roles.

## TOTAL FACULTY BY TIME BASE

Full Time	13,494	48.7%
Part Time	14,188	51.3%
<b>Total</b>	<b>27,682</b>	<b>100%</b>

## DEGREES CONFERRED 2018-19

Bachelor's Degrees	107,319	84.2%
Master's Degrees	19,545	15.4%
Doctoral Degrees	536	0.4%
<b>Total</b>	<b>127,400</b>	<b>100%</b>



## UNIVERSITY-WIDE ENROLLMENT – FALL 2014-19

2014	460,200
2015	474,571
2016	478,638
2017	484,297
2018	481,210
2019	481,929

# CALIFORNIA STATE UNIVERSITY, FULLERTON

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- Largest university in the system with 40,000+ students
- Civil and Environmental Engineering Department
  - ~650 undergraduate students; ~200 graduate students
  - Has state-of-the-art laboratory facilities for graduate research
  - Offers graduate programs (M.Sc. only) in
    - Civil Engineering (Focus – structural, geotechnical, water resources, transportation, construction management, environmental engineering)
    - Environmental Engineering (Fully online) – **highly ranked**



# WHY STUDY ABROAD? WHY IN USA?

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- Understanding new culture and enhancing cultural competency
- Making friends globally – expanding global network
- Making yourself independent in global context
- Traveling to new place in the world
- Enhancing job prospect in global market
- Securing better living with enhanced job security
- USA provides ocean of opportunities – learning new technology during study and good job prospect after receiving degree





# SOME HIGHLY RANKED CIVIL ENGINEERING PROGRAMS

## Best 5 Public Civil Engineering Schools

### *Having Ph.D. as terminal degree in Civil Engineering*

1. University of California—Berkeley
2. University of Illinois--Urbana-Champaign
3. Georgia Institute of Technology
4. University of Texas--Austin
5. Purdue University--West Lafayette

### *Having M.Sc. as terminal degree in Civil Engineering*

1. California Polytech St Univ--San Luis Obispo
2. United States Military Academy
3. California St Polytechnic Univ—Pomona
4. **California State University--Fullerton**

## Best 5 Private Civil Engineering Schools

### *Having Ph.D. as terminal degree in Civil Engineering*

1. Stanford University
2. Massachusetts Institute of Technology
3. Carnegie Mellon University
4. Northwestern University (McCormick)
5. Cornell University

### *Having M.Sc. as terminal degree in Civil Engineering*

1. Rose-Hulman Institute of Technology
2. Bucknell University
3. Harvey Mudd College
4. Cooper Union for the Adv of Science and Art



# CIVIL ENGINEERING DEGREES

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- Follow your pace - 9 months to 36 months (generally 18-24 months)
- 30 semester units – transferrable to Ph.D. programs

## *M. Sc. (or Ph.D.) in civil engineering/ with focus or concentration in*

- Structural Engineering
- Geotechnical Engineering
- Water Resources Engineering
- Transportation Engineering
- Construction Engineering or Management
- Environmental Engineering



## *M. Sc. (or Ph.D.) in*

- All the concentrations mentioned above

# QUALIFICATIONS NEEDED

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- Short-term vs Long-term
- Desire to leave home and explore new opportunities/ connection – hard in the beginning but pays off at the end
- In this talk I will focus on USA, and graduate study only
- For graduate level study
  - Good GPA (higher than 3.0/4.0 just for application)
  - Good GRE score
  - Good TOEFL score
  - Excellent letters of recommendation
  - Excellent study prospectus/plan essay



# ABOUT REQUIRED TESTS

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- Graduate admission in majority of the competent universities are controlled by the departments, and required scores vary with universities
- TOEFL
  - Required minimum TOEFL scores: 80+ (iBT); 90+: common
  - Speaking, listening, writing, reading (18+: common)
- GRE
  - 155+ in quantitative
  - 150 + in verbal
  - 4+ in analytical writing



# SCHOLARSHIP/ FELLOWSHIP/ ASSISTANTSHIP

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- Scholarships/ Fellowships
  - Fulbright (Apply at home country) – find an US university
- Graduate Research Assistant
  - University support for working with professors on their research
  - Faculty members provide or supplement funding continuation
- Graduate Teaching Assistant
  - University support for helping professors in their teaching
  - Department supports these TAs
  - Continuation depends on GPA and performance



# APPLICATION PROCEDURE

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- Shop for different schools and check department/ faculty profiles; tuitions are the key
- Select the schools that you want to apply (different tiers to increase your odds )
- Ready for application; Each university is different
- Electronic application portal
- Transcripts – may not need to graduate (compile up to the final year)
- Test scores – TOEFL and GRE
- Recommendation letters – online
- Study prospectus essay (write your research/ project/ experience)
- Financial support form (if looking for TA/ RA)
- HAVE BACK UP PLAN



# PROS AND CONS OF STUDYING ABROAD - USA

## PROS

- Enhance cultural competencies
- Understanding of design practices in USA
- Salable degree – worldwide
- Better job prospective and pay after graduation (2019 Median Annual Pay - \$87K; 329,200 jobs in 2019)
- Access to world-class research and projects
- Expand global network
- Opportunities – no limit

## CONS

- Need to adapt in new technology; culture
- Communication gap with local needs/ context as well as colleagues at home
- Need to leave home and adapt to new living condition/ environment
- Culture shock/ home sickness
- Can be expensive if tuition not waived
- Anxiety – immigration policy of USA
- May miss opportunities available at home

# DIFFERENCE BETWEEN STUDYING ABROAD AND IN NEPAL

- It depends on what you want – want to study in Nepal and focus in Nepalese work environment; or want to see more options.
- Study abroad will open your exposure, network, and job prospective wider.
- US civil engineering jobs are highly paid (but think that living cost is high as well depending on where you live)
- Study abroad – can have exposure to cutting edge research area and technology – long-term benefit
- You will be able to witness sophisticated infrastructure



# USEFUL TIPS TO ELEVATE FUNDED GRADUATE STUDY OPPORTUNITIES

- Don't wait until you complete your B.Sc. Degree – time flies
- Take TOEFL and GRE tests; repeat until you get the best score
  - Shoot for 170 in GRE quantitative
- Depending on your score, look for the best school that works for you
  - Living expense; funding availability; ranking; specialization
- Apply for multiple tier universities and at different locations – rural vs urban; top research school vs good quality graduate curriculum/ faculty/ research lab/ well respected faculty mentor
- Contact professors and tell them what attribute you have
- Contact current Nepalese students in that university – if any





# NEPALESE GRADUATE STUDENTS THAT I MENTORED

- Total Graduate Students I Supervised : 52  
(1 Ph.D.; 51 M.Sc.)
- Graduate Students from Nepal: 10
- From Pulchowk Campus: ~All RAs 4
- Working in Industry: 10
- Completed M.Sc. Only and worked: 9
- Moved to Ph.D. and completed: 1



# SUMMARY AND CONCLUSION

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- Make your decision on whether you want to take this big step
- Have your application package ready – test scores, transcript, recommendations, CV, study perspectus essay
- Decide the main focus area of your graduate study
- Shop for - department and faculty profiles; sponsored projects
- Email professors who have similar research interests
- Contact Nepalese students in that university/ discipline
- Apply for multiple schools – preferably at different tiers
- Be mindful of living cost and potential visa issues



TERIMA KASIH  
GRACIAS  
KIITOS  
DZIĘKUJĘ  
DANK U  
DANKIE  
DĚKUJI  
DANKE  
MULTUMESC  
TACK  
MERCI  
TAKK SALAMAT  
OBRIGADO  
THANK YOU  
DĀKKA PĒR  
SPASIBO  
GRAZIE  
謝謝  
БЛАГОДАРЯ  
FALEMNDERIT

