UNIVERSITY OF TEXAS ARLINGTON

AI VIET NAM

The US Graduate Programs (Master/Ph.D Levels)

Tuan Dang (Ph.D. Candidate)

Khang Nguyen (Incoming Phd. Student)

University of Texas at Arlington, Texas, USA

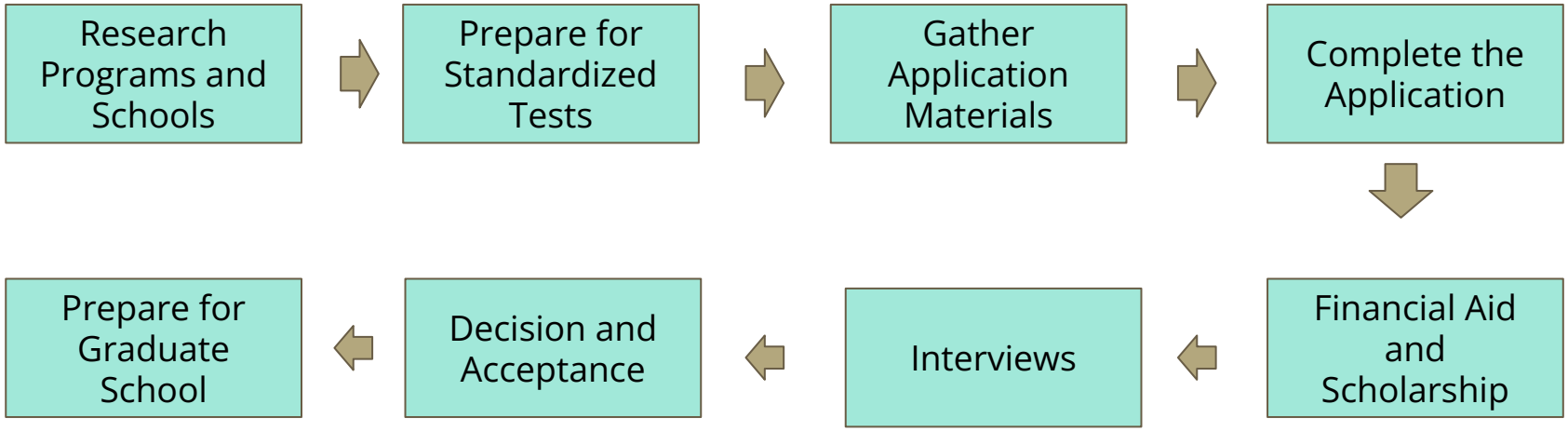
Love to see if you

- Feel like asking your friends
- Ask questions any time even interrupt me
- Raise your hand or raise your voice if I don’t notice your question in chats

Agenda

- Overview US Graduate Programs
- Use-cases
- Important notes / Tips / Strategies

Overview: Application Process



Research Programs and Schools

- **Identify Your Interests**: Determine the field of study and specific areas of interest.
- **Research Schools**: Look for universities offering programs that align with your interests. Consider factors such as faculty, research opportunities, location, and program reputation.
- **Check Requirements**: Each program may have different prerequisites and application requirements.

Prepare for Standardized Tests

- **GRE/GMAT:** Many programs require standardized tests like the GRE (Graduate Record Examination) or GMAT (Graduate Management Admission Test). Check if your programs of interest require these tests.
- **Subject Tests**: Some programs might require a subject-specific GRE test.
- **TOEFL/IELTS**: International students may need to demonstrate English proficiency through tests like the TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing System).

Gather Application Materials

- **Transcripts**: Obtain official transcripts from all post-secondary institutions attended.
- **Letters of Recommendation:** Typically, you'll need 2-3 letters of recommendation from professors or professionals who can speak to your qualifications.
- **Statement of Purpose**: Write a compelling statement outlining your academic and professional goals, and why you are interested in the program.
- **Resume/CV**: Prepare a detailed resume or CV that includes your academic background, work experience, research, publications, and any other relevant information.
- **Writing Samples**: Some programs may require writing samples or portfolios.

Complete the Application

- **Application Forms**: Fill out the application forms for each program.
- **Application Fees**: Be prepared to pay application fees, which can vary by institution.
- **Submission**: Ensure that all materials, including test scores and recommendation letters, are submitted by the deadlines.

Financial Aid and Scholarships

- **FAFSA**: For U.S. citizens and eligible non-citizens, fill out the Free Application for Federal Student Aid (FAFSA).
- **Assistantships and Fellowships**: Many programs offer teaching (**GTA**) or research assistantships (**GRA**) and fellowships. Check the availability and application process for these opportunities.
- **External Scholarships**: Look for scholarships offered by external organizations related to your field of study (VIN Group, FPT).

Interviews

- **Interview Preparation**: Some programs may require an interview as part of the application process. Prepare by researching common questions and practicing your responses.
- **Schedule and Attend**: Be prompt and professional in all interview interactions

Decision and Acceptance

- **Decision Notification**: Schools will notify you of their decision, usually by email or through an online portal.
- **Respond to Offers**: Once you receive offers, respond by the given deadlines. Notify the schools of your decision to accept or decline the offer.
- **Final Steps**: Complete any remaining paperwork, such as enrollment forms and financial aid documents.

Preparing for Graduate School

- **Housing**: Arrange for housing if you need to relocate.
- **Orientation**: Attend any orientation programs offered by the university.
- **Course Registration**: Register for your courses and familiarize yourself with the campus and resources available to you.

Use-case:

1. Major + Research → School + Professor
2. Contact PI (by mail / by someone else)
3. Prepare application materials
4. Open portal for EACH school
5. Fill application + Upload necessary materials
6. Application fees vary between schools
7. ...
8. More tips

Use-Case: Choosing Your Schools & Professors

1. **Major + Research → School + Professor (PI)**
   Eg: Computer Science + Robotics → UCSD + Henrik Christensen
   Eg: Computer Engineering + Robotics → UCSD + Nikolay Atanasov
   → Make a list of these PIs with deadlines for each school.
   → Send to your recommenders to make/keep them on track.
2. **Contact your prospective PI**
   (by e-mail or meet at conference)
   → Introduce yourself
   → Common interest
   → Send résumé/CV
   → **BE POLITE**

Nguyen, Khang M
To: hichristensen@eng.ucsd.edu

Reply | Reply all | Forward
Wed 05-Apr-23 16:23

Resume_KhangNguyen.pdf
192 KB

Hello Dr. Christensen,

I am Khang Nguyen, and I am currently a third-year Computer Science undergraduate at the University of Texas at Arlington. I reached out to you since I am interested in robotics work from your group at UCSD, especially on grasping-related research papers/projects. Also, I do have intentions to pursue a Ph.D. degree in robotics after graduation, as I will be graduating in Spring 2023.

Therefore, I would love to be working under your supervision in the future, and curious if there are any open positions for Ph.D. students in Fall 2023.

I hope that you could get to know me through my resume in attached. I am looking forward to your response.

Sincerely,

Khang Nguyen
https://mkhangg.com/

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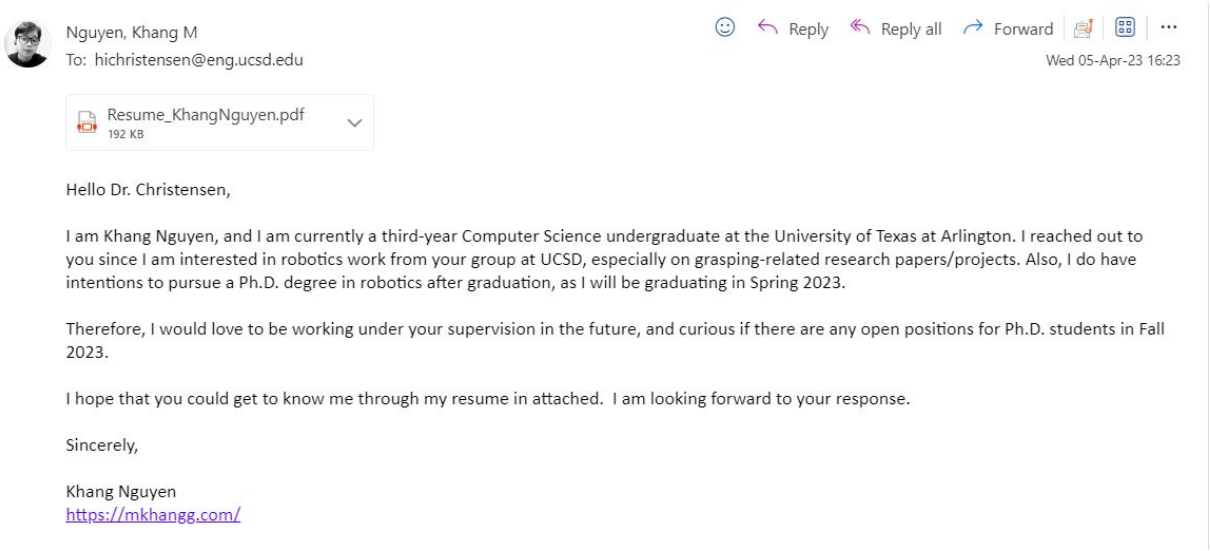
13	Lydia Kavraki	Rice	https://www.cs.rice.edu/~kavraki/	o	December 31, 2023
	Vaibhav Unhelkar	Rice	https://profiles.rice.edu/faculty/vaibhav-unhelkar	o	December 31, 2023
14	Kostas Bekris	Rutgers	https://robotics.cs.rutgers.edu/pracsys/members/kostas-bekris/	o	December 31, 2023
15	Shuran Song	Stanford	https://shurans.github.io/		December 5, 2023
16	Jeannette Bohg	Stanford	http://web.stanford.edu/~bohg/		December 5, 2023
17	Oussama Khatib	Stanford	https://khatib.stanford.edu/		December 5, 2023
18	~~Ken Golberg~~	~~UC Berkeley~~	~~https://goldberg.berkeley.edu/~~	x	
19	Pieter Abbeel	UC Berkeley	https://people.eecs.berkeley.edu/~pabbeel/		December 11, 2023
20	Sergey Levine	UC Berkeley	https://people.eecs.berkeley.edu/~svlevine/		December 11, 2023
21	Henrik Christensen	UCSD	https://www.hichristensen.com/	o	December 20, 2023
22	~~Kris Hauser~~	~~UIUC~~	~~http://kkhauser.web.illinois.edu/~~	x	
23	Kostas Daniilidis	UPenn	https://www.cis.upenn.edu/~kostas/		December 15, 2023
24	~~Stefanos Nikolaidis~~	~~USC~~	~~http://www.stefanosnikolaidis.net/~~		
25	Roberto Martin-Martin	UT Austin	https://robertomartinmartin.com/		December 15, 2023
27	Tucker Hermans	Utah	https://robot-learning.cs.utah.edu/thermans		December 15, 2023
28	Byron Boots	UW	https://homes.cs.washington.edu/~bboots/		December 15, 2023
29	Dieter Fox	UW	https://homes.cs.washington.edu/~fox/		December 15, 2023

Use-Case: Contact Your Professors of Interest

2. **Contact your prospective PI**
   (by e-mail or meet at conference)
   → Introduce yourself
   → Common interest
   → Send résume/CV
   → **BE POLITE**



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Use-Case: Preparing Application Materials

3. **Prepare application materials (SPEND MOST TIME ON THESE!)**
   → Be sure to well-tailor your SOP. You can read previous examples here.
   → Define *research topic* and *research questions* with your long-term goal.

With the impetus to demystify these, my long-term goal is to bolster hand-eye-force coordination for robust robotic grasping using cognitive architectures. Therefore, I aspire to continue working on projects addressing the following problems throughout my Ph.D. and well beyond my graduation:

1. **Perception for Grasping and Manipulation**: *How can we embody human-like perception in robots to perceive diverse objects under different unstructured representations?*
2. **Learning to Grasp Deformable Objects**: *What are potential human-inspired mechanisms for robots to self-learn grasping objects of various physical properties based on visual-force feedback?*

   → Mention your *POI (Professor of Interest)* at the end.

Motivated to achieve this goal, I am greatly interested in working with **Dr. Henrik Christensen** and **Dr. Hao Su** in a highly esteemed environment like **CSE@UCSD**. I also appreciate research areas at **Cognitive Robotics Lab**, spanning diverse areas in robotics and cognitive science, which would be valuable and complementary to my interests.

Use-Case: Open Portal & Apply

4. **Open portal for EACH school**
   → Be sure to manage all application accounts.
   NOTE: Texas state schools do have different way to apply.
5. **Fill application + Upload necessary materials**
   → Varies among schools, but largely be the same.
   → Transcripts need to be converted to 4.00 or 4.30 scale.
   → GRE/GMAT and TOEFL/IELTS take *~5 days* to arrive to school officials.
6. **Application fees vary between schools**
   → Fees will vary among schools, but expect about **$100/application**.
   → You can also request application fee-waiver.

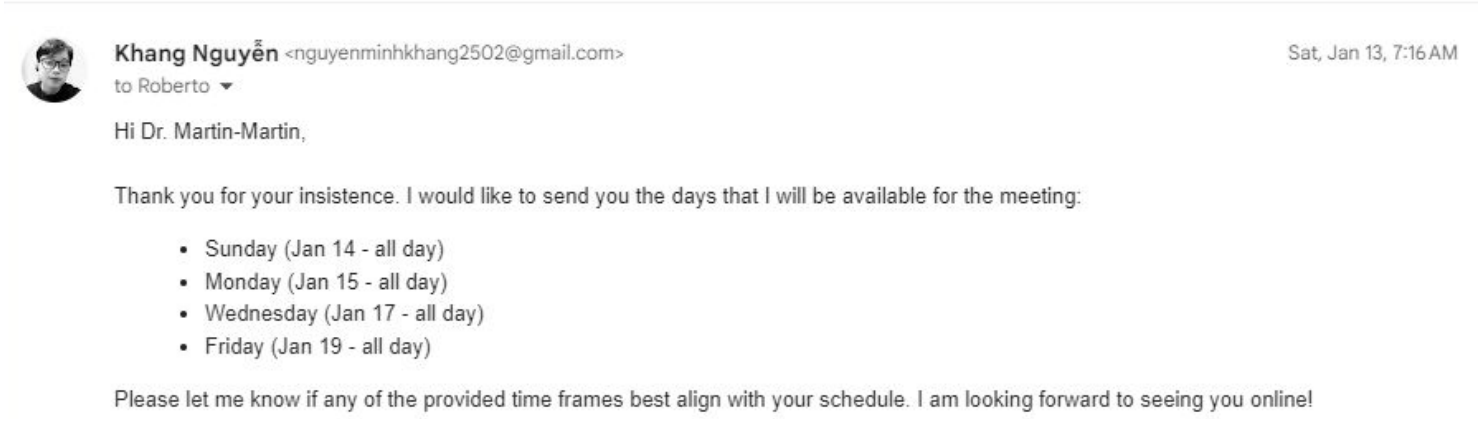
Use-Case: Waiting for Interview/Decisions

7. **Waiting for Interviews**

→ *Most professors* do interviews with their applicants of interest.

→ Interviews happen around *mid-Jan to late-March*.

→ Be sure to give POIs list of available time slots.



Khang Nguyễn <nguyenminhkhang2502@gmail.com> Sat, Jan 13, 7:16 AM

to Roberto

Hi Dr. Martin-Martin,

Thank you for your insistence. I would like to send you the days that I will be available for the meeting:

- Sunday (Jan 14 - all day)
- Monday (Jan 15 - all day)
- Wednesday (Jan 17 - all day)
- Friday (Jan 19 - all day)

Please let me know if any of the provided time frames best align with your schedule. I am looking forward to seeing you online!

Use-Case: Preparing for Interview/Decisions & After It

8. **Preparing for Interviews**
   → Make slides, including your research interest, past experiences, and future endeavors.
   → Practice to talk about 30-40 minutes.
   → Remember to have a thank-you e-mail after the interview.
9. **Waiting for Official Decisions**
   → Results are typically rolled out from early-March till mid-April.

Use-Case: Waiting for Interview/Decisions

7. **Waiting for Interviews**
   → *Most professors* do interviews with their applicants of interest.
8. **Preparing for Interviews**
   → Make slides, including your research interest, past experiences, and future endeavors.
9.

Important notes

- TOEFL/IELTS
- GRE (Master: Required; Ph.D: Not Required)
- Research papers/ Research projects
  - Priotizite prestigious journal/ high ranking conference
- SOP: Statement Of Purpose
- Letter of Recommendations
  - Should come from who working with you
  - Experts of fields
- Resume/CV
- Interview

TOEFL/GRE

OVERVIEW | MASTER | DOCTORAL | CERTIFICATE

ADMISSION

The CSE graduate admission committee bases its decision for M.S. graduate admission on the following criteria (in no specific order):

- An undergraduate degree, preferably in an area related to computer science, computer engineering, or software engineering.
- An overall GPA of 3.0 or higher in undergraduate coursework.
- A 3.2 grade point average (on a 4.0 scale) on the last two years of undergraduate coursework. In particular, performance on Computer Science/Computer Engineering/Software Engineering related courses are emphasized.
- Relevance of the student's degree (background) to the CSE curriculum.
- Rigor of the student's Bachelor's degree. A three-year degree is not considered rigorous. Note: International applicants with a "3+2" Master's degree will be evaluated as equivalent to a 4-year Bachelor's degree.
- Reputation of the University/College from which the student has received his/her previous degrees.
- A sum of verbal plus quantitative scores of at least 305 on the GRE. Additionally:
    - GRE quantitative score of at least 160
    - GRE verbal score of at least 145
    - The department does not require the advanced computer science test. A passing score on the Engineering in-Training (EIT) exam is also given consideration for admission decisions.

- Students may be accepted with a GRE score of 300, but may be required to complete additional coursework for their MS degree (see degree requirements found later in this document). In this case:
    - GRE quantitative score of at least 155
    - GRE verbal score of at least 145

- Students may also be accepted with up to three deficiency courses, but may be required to do additional coursework for their MS degree (see degree requirements found later in this document).
- International Applicants will need to take the Test of English as a Foreign Language (TOEFL) and score at least 83 with no area score of less than 20, or take the International English Language Testing System (IELTS) and score at least 6.5 in all areas.

OVERVIEW | MASTER | DOCTORAL | CERTIFICATE

ADMISSION

The CSE graduate admission committee bases its decision for Ph.D. graduate admission on the following criteria (in no specific order):

- An overall GPA of 3.0 or higher in undergraduate coursework.
- A GPA of 3.2 or higher on CS/CpE/SwE related coursework in the last two years of undergraduate degree.
- For students holding an M.S. degree, similar criteria apply.
- Relevance of the student's degree(s) (background) to the CS/CpE/SwE curriculum.
- Rigor of the student's bachelor's degree and M.S. degree if applicable..
- Reputation of the university/college that the student has received his/her previous degrees from.
- GRE General Test (Optional):
- GRE is currently optional but strongly recommended for the Ph.D. applicants.
- For Ph.D. applicants, three letters of recommendation are needed, as well as a statement of purpose. These should be addressed to Head of Ph.D. Admissions and emailed to: CSEGradAdvising@uta.edu.
- For Ph.D. applicants, the following are optional. Meeting these criteria will improve both a student's chances of securing admission and receiving financial support.
    - Publication in scholarly conferences/journals.
    - A percentile of 80 score or higher on the Computer Science subject GRE.

The above criteria are used as follows in relevance to the three possible admission decisions, i.e., *Unconditional Status; Probationary Status;* and *Denied*.

- *Unconditional Status:* Applies to an applicant who meets the first six criteria above to a degree satisfactory to the graduate admissions committee.
- *Probationary Status:* Applies to an applicant who meets at least five of the six criteria to a degree satisfactory to the graduate admissions committee and whose record shows promise for success in the program or to an applicant who does not fulfill all the deficiency course requirements.
- *Denied:*Applies to an applicant who does not meet five of the first six criteria to a degree satisfactory to the graduate admissions committee.

Research Papers/Projects

- Join research groups
  - Start with assistant to senior researcher in the groups/labs
  - Show the potential kills
- Willing to learn new techniques
- Conduct experiments
- Learn how to write a research paper
- Learn how to understand/draw charts / figures

Statement Of Purpose (SOP)

Answer questions:

- **Why** you want to pursue a PhD.
- **What** specific research interests you have.
- Why you are interested in this particular program and university.
- **How** your background has prepared you for this program.
- What your future career goals are and how this PhD will help you achieve them.

Typical SOP Structure

- Introduction
  - Engaging Opening: from **personal story** linking to what you want to pursue
  - Motivation: explain how you passion about the field
- Academic Background
  - Education: relevant degrees, majors
  - Research Experience: research projects
  - Publications and Presentations: Journals, Conferences papers
- Research Interests
  - Specific Interest: state clearly what you want to pursue
  - Alignment with Program: explain why what you choose is the best fit your research
  - Previous Work: Link your past research to support your choice
- Career Goal
  - Short-term goals:
  - Long-term goals:
- Conclusion:
  - Restate motivation
  - Summary why you are a good fit for the program

SOP Example

Example taken from

https://cs-sop.notion.site/CS-PhD-Statements-of-Purpose-df39955313834889b7ac5411c37b958d?p=576a9d5f9eab4361b3c2589acb137c8f&pm=s

https://drive.google.com/file/d/1Vvwisp-bRJ2xNXTemIqiBXY1MQQI8vb0/view

My primary research focus lies in the intersection of natural language generation (NLG) and establishing a science of language model behaviors. I am captivated by the versatility of general-purpose language models to tackle a wide range of generation tasks. However, it is unclear how these models acquire high-level generation behaviors and capabilities through various training data and dominant learning paradigms. This understanding is critical, as an old Korean saying goes, 'A tree with deep roots is not shaken by the wind.' I aim to build an **analysis model that could explain the factors enabling language models to learn specific capabilities**.

Concretely, my research interests include: (i) developing **fine-grained evaluation frameworks** that systematically identify what specific capabilities language models lack and (ii) exploring the role of **synthetic data to induce desired abilities** into language models for further improvement. Similar to complex systems science, building a solid foundation for understanding language model behaviors will provide insights on enhancing their ability to address more complex tasks.

1 Holistic Evaluation with Fine-grained Criteria

Given two different language models, how can we systematically determine which one is better than the other in various scenarios? The ability of language models to generate fluent long-form text makes marginal improvements on classification benchmarks less significant for detailed inspection. On the other hand, evaluating long-form responses poses a unique challenge, as it's exceptionally difficult to assess the quality of a given text. Conventional methods, such as employing reference-based evaluation metrics (*e.g.*, Rouge, BERTScore), or using language models as judges based on coarse-grained criteria (*e.g.*, Helpfulness, Harmlessness) often fail to **capture the depth and granularity** that human evaluation offers.

I believe the difficulty in evaluating long-form outputs arises from the **ambiguity in defining what constitutes a good output**. In contrast, humans naturally discern key factors such as creativity, tone, and cultural sensitivities. In two of my publications [1, 2], my colleagues and I have developed an evaluation framework that includes a fine-grained criteria for each instance and employed language models as a judge. This approach was effective at pinpointing specific areas where language models fall short. For example, when assessing a response for a FinTech startup's strategy, it is more instructive to check for omitted details about crucial aspects, such as regulations and compliance, rather than assigning a simplistic harmlessness score.

Networking

- Email: School > Department > Faculty Profile
- Linkedin
- Social Network: Twitter, Facebook
- Seminar: online/offline
- Research conferences

Most popular one

Quỳnh Khanh
9 hours ago ·

🚨CƠ HỘI NHẬN THƯ GIỚI THIỆU TỪ 4 GIÁO SƯ KINH TẾ HÀNG ĐẦU THẾ GIỚI🚨

Một trong những lợi ích của khóa Dự bị Thạc sĩ - Tiến sĩ khối ngành Kinh tế tại CASED dành cho các bạn học viên là thư giới thiệu được ký chung bởi các Giáo sư trong Hội đồng khoa học của CASED. Đặc biệt, kể từ khoá Pre-Master&PhD Spring 2024 K9, ngoại trừ chữ ký của 3 Giáo sư là GS. Lê Văn Cường (Paris School of Economics), GS. Trần Nam Bình (University of New South Wales) và GS Phạm Hoàng Văn (University... See more

VietPhD.org

Private group · 104.4K members

+ Invite | Share | Joined

Hội Sinh Viên Việt Nam Đại Học Tokyo created an online event.
16h ·

WED, 10 JUL AT 08:00 CDT

Giới thiệu chương trình tuyển sinh và học bổng vào ĐH Tokyo

2 people going

☆ Interested

Recommendation Of Letter

- From Networking
- The US professors prefer to write it their own

Job seekers

- CareerBuilder
- **Glassdoor**
- **Indeed**
- **LinkedIn**
- LinkUp
- Monster
- SimplyHired
- Snagajob
- Wellfound
- ZipRecruiter

OPT = Optional Practical Training

- F1 Visa
- Standard 12 months
- Another an extension for STEM field 24 months

Resources

- https://www.usnews.com/education?top_nav_Education
- https://csrankings.org
-

Q&A