

Let's Get Into Research Intern!

SWC Community

Presented By-

SHUBHAM KUMAR GUPTA (UiT Norway)

KARTIKAEYA KUMAR (MITACS, University of Toronto)

ANKIT RAJ (MITACS, University of Windsor)

No Internship yet or wanted Research Interns?

- How we got this Intern
- Work experience
- Suggestions
- How, You can get this Intern !
- Where to apply?, Last date, etc



Lead I: MITACS GLOBALINK RESEARCH INTERNSHIP

- Hello! This is Kartikaeya, 4th year, EEE undergrad.
 - Currently intern at University of Toronto.
 - Worked on Virtual Reality, specifically on 360 videos, and currently working on publishing the findings from the research.
 - About the MITACS program
- A. Matches students from various countries to canadian professors for a 12 week internship. Roughly 500 global interns(100-200 from India, 3 from IITG this year).
- B. Relatively easier to get into with an average CPI. Great stipend, experience depends upon the particular lab/professor. Provides scholarship for graduate studies in Canada on completion of the internship.
- C. Selection Procedure: application(CV, LOR, SOP, transcript, CPI & 7 selected projects), interviews(around Nov)
- C. Deadline for applying for summer'22 is Sept 22nd. More information can be found here : <https://www.mitacs.ca/en/programs/globalink/globalink-research-internship>

General Prerequisites for 3rd year research intern

1. CV
2. Strongly suggested to have prior research experience.
3. Letter of Recommendation(LOR) from prof. (some programs even ask for 2 LORs)
4. Statement of Purpose(SOP)
5. Academic transcripts
6. CPI

Some 3rd year research programs

- | | |
|------------------------------|--|
| 1. MITACS (Canada) | 6. ETH Zurich Summer Fellowship(Germany) |
| 2. SN Bose (US) | 7. ISTernship(Austria) |
| 3. Charpak (France) | 8. India Connect@NTU(Singapore) |
| 4. DAAD (Germany) | 9. RISS, CMU(US) |
| 5. summer@EPFL (Switzerland) | 10. Caltech SURF(US) |

List of some research internship opportunities for 2nd year :

<https://docs.google.com/document/d/1XUZKH9Lm1vI7BMelb2tqDQIl7oIrdWbVinSKCJsGgJI/edit?usp=sharing>

Resources

- <https://mystudentvoices.com/a-comprehensive-guide-to-academic-internships-abroad-edfcb6b28c28>
- <https://github.com/himahuja/Research-Internships-for-Undergraduates>
- <http://anumbmind.xyz/career/internship-guide/30-foreign-research-internship-for-indian-engineering-students/>
- <https://medium.com/@mohansacharya/so-you-want-to-intern-abroad-305b338b0a3c>

And Finally, do research for research internships

- Long and laborious process
- Learn to search for additional internships opportunities(look through blogs, websites of labs/profs).
- Learn to search for professors working in your domain(use google scholar, dblp etc.)
- Learn to write proper emails to professors(read blogs)
- Learn to seek out opportunities through connections.
- Finally, there is still a little bit of luck involved, if you fail at one opportunity, try another.

Lead II: Ankit Raj, University of Windsor

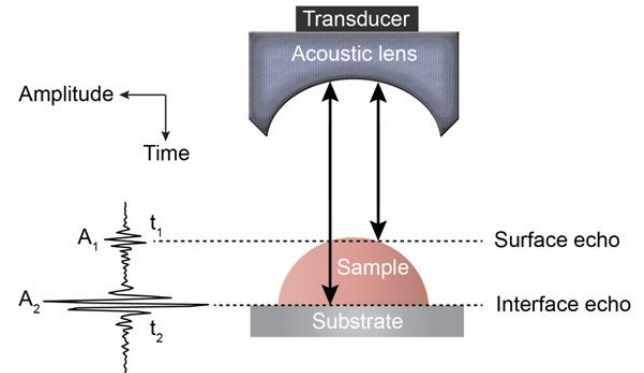
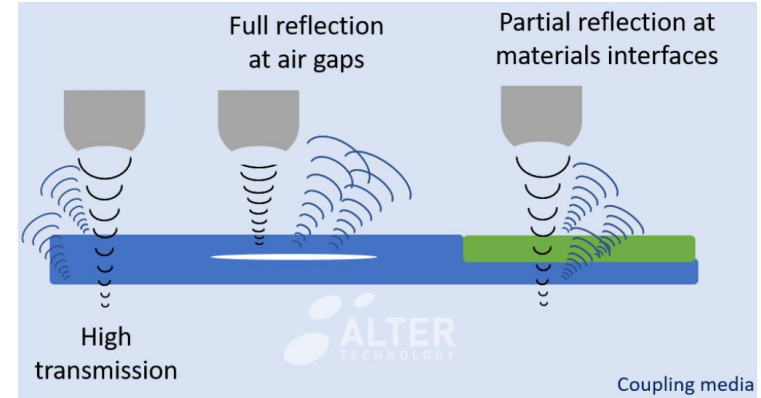
Lead III: UiT The Arctic University of Norway

- Hello! This is Shubham, 4th Yr, Chemical Eng.
- Opportunity to get research intern
- Work From Home due Covid
- 3 months intern
- PAID!! 35-40k per month
- Conference Paper! YAY!!
- Journal Paper! YAY!!



Lead III: UiT The Arctic University of Norway(WORK DETAILS)

- Sound Acoustic Microscope
- Tech Stacks: LabView, Matlab, Python
- Other Roles may be available
 - Machine Learning (GANs)
 - Denoising Sound Waves
 - Hardware developments
- Sound can penetrate Objects
- Imagine coin made of cake!



Lead III: UiT The Arctic University of Norway(How You can get!)

Summer Internship (2022) at UiT The Arctic University of Norway

Development of Acoustic and Phase Sensitive Acoustic Microscopy

We are looking for a highly motivated student for developing a cutting-edge acoustics and phase sensitive acoustic microscopy. Such microscopy employed for quantitative imaging and characterization for nondestructive testing (NDT) and medical imaging.

Requirements:

- Good knowledge in LabVIEW and MATLAB
- Good work ethics
- Team player
- Good writing skills

What we offer: Fellowship 10,000 NOK/month and round-trip air fare

Duration: 3-6 months

Lead III: UiT The Arctic University of Norway(How You can get!)

- Selection Criteria:
 - I will share a H5 or HDF5 data you have to plot the data on Labview! While learning it!
- First Come First Serve
- 5-6 Max students can be selected
- It can be two types
 - WORK FROM HOME (MAY BE PAID/UNPAID) (**MAX 3**)
 - NORWAY VISIT(WILL BE PAID) (**MAX 3**)
 - VISA/FLIGHT REIMBURSEMENT
 - 10k NOK (~1 Lakh) per month 💰 (You will be given a pay card! SWIPE 😊)
 - NO EXTRA ALLOWANCE (Food, Hostel,etc to be managed from same!)
 - Money Spent should be on Rent/Food/Etc
 - EVERY MONTH YOU CAN SAVE MAX 4-5 NOK = 40k-50k INR per month

Lead III: UiT The Arctic University of Norway(Further contact!)

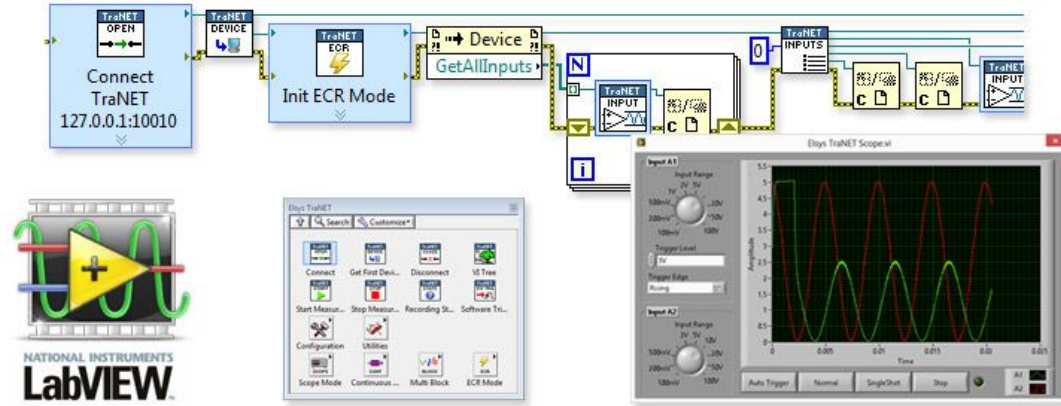
- Problem Statement
 - Development of Acoustics and Phase Sensitive Acoustic Microscopy
 - Quantitative imaging and characterization for nondestructive testing (NDT) and medical imaging.
- TASK:
 - READ & EXTRACT H5 DATA on LABVIEW
 - APPLY BILATERAL FILTER, MEDIAN FILTER & GAUSSIAN FILTER
- H5 (Hierarchical Data Format version 5) It saves data(matrix, single variables etc) in a hierarchical format
- H5 DATA LINK:
<https://drive.google.com/file/d/1CGJmZJWm8sKKQ2nylvNalnuZ2S5Y9zeB/view?usp=sharing>
- You can contact me or Norway Professor directly (Dr. Anowarul Habib)
- Mine Whatsapp Number : +91-620-455-3564
- Prof Whatsapp Number : +47-96-72-0731

For Further information contact:

Dr. Anowarul Habib
Email: anowarul.habib@uit.no
Tel: +47 96720731

Lead III: UiT The Arctic University of Norway(Hints and Data!)

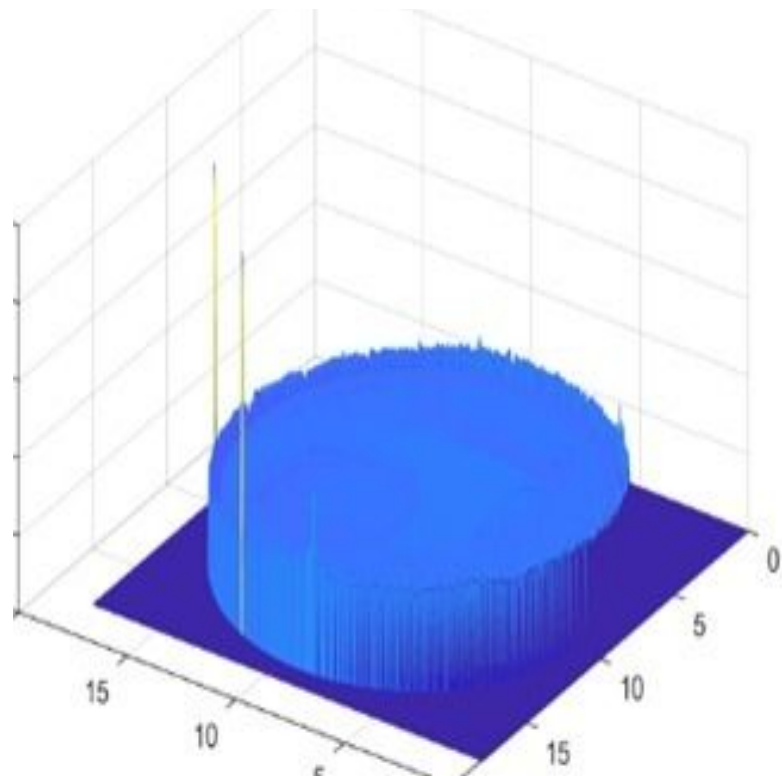
- Tricks to complete this fast
- StackOverflow/LabView Forum:
 - You can get some hints (🤔)
- Try **HDF5 Viewer** to look contents
- Try Matlab or Python first to formulate



- INSTALL x64 BIT LABVIEW
- LABVIEW 2020 CRACK You can get it!
- DATA MATRIX is there
- **DON'T POST YOUR DIRECT LINK TO H5 FILE PUBLICLY!**

Lead III: UiT The Arctic University of Norway(Hints!)

- Last year 25 applied for this!
- It took me around 3 days to complete all of this!
- Try your best!
- Do remember First Come First Serve!



Let the magic begins

See you at Norway!

(FILL FORM & JOIN WHATSAPP GRP)

<https://forms.gle/W8Lku1gLhLPec5Qx7>