

Phase 2 Orientation

Bertelsmann Technology Scholarship

March 19, 2020



CONGRATULATIONS! 🎉

You did it!

You're moving on to Phase 2!





TODAY'S AGENDA

- Nanodegree Overview
- Project Review Process
- Plagiarism and Academic Honesty Policy
- Phase 2 Resources
- Program Advice
- FAQs
- Open Q&A

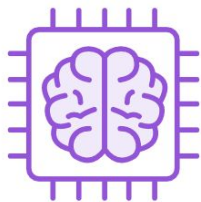
Nanodegree Overview



Welcome to Phase 2:

- **Nanodegree Phase 2 —**
 - **AI Track:** Deep Learning Nanodegree*
 - **Cloud Track:** Cloud DevOps Nanodegree
 - **Data track:** Data Analyst Nanodegree

**We're going to use the Deep Learning Nanodegree as an overview example!*



**Deep Learning
Nanodegree**



**Cloud DevOps
Nanodegree**



**Data Analyst
Nanodegree**

Nanodegree Project Summaries

- **You must complete and pass these in order to graduate!**
 - *Deep Learning Nanodegree has **5 technical projects***
 - *Cloud DevOps Nanodegree has **4 technical projects***
 - *Data Analyst Nanodegree has **4 technical projects***
- Each project will have a brief **project overview** outlining the project.
- Each project will also have a **project rubric** — a list of specifications you are expected to meet.
- When your project is ready, follow instructions and formally **submit your project for code review**.
- **Take your projects seriously** and use them to solidify your own knowledge and mastery of the skills and concepts you learn throughout the Nanodegree program

How Nanodegrees Are Structured

Deep Learning

OVERVIEW | STUDY PLAN

Start **Project 1** Project 2 Project 3 Project 4 Project 5 Project 6 Project 7

To Do

Pick up where you left off
Lesson 1: Convolutional Neural Networks [CONTINUE](#)

Project 1: Predicting Bike-Sharing Patterns
In this project, you'll build and train your own Neural Network from scratch to predict the number of bikeshare users on a given day. Good luck! [GO TO PROJECT](#)

Rahul is here to help
Your personal mentor wants to answer your questions and help you stay on track. [GO TO STUDENT HUB](#)

Upcoming

SEARCH

PROGRAM HOME

SYLLABUS

CORE CURRICULUM

1. Introduction to Deep Learning

2. Neural Networks 24%

3. Convolutional Neural Networks 27%

4. Recurrent Neural Networks 6%

5. Generative Adversarial Networks

6. Deploying a Model

EXTRACURRICULAR

- **All three Nanodegree programs consists of lessons + real-world technical projects** — these will need to be completed and submitted for formal code review
- **Set Study Session times** to receive study reminders - regular study habits is key!

Project Overview Page

◀ Project:
Predicting Bike-Sharing Patterns

SEARCH 🔍


RESOURCES ▲


CONCEPTS ▼

✓ 1. Introduction to the Project

✓ 2. Project Workspace

★ 3. Project: Predicting Bike-Sharing ...

 Knowledge
Search project Q&A

 Student Hub
Chat with peers and mentors

☰ Predicting Bike-Sharing Patterns [SUBMIT PROJECT](#)

Project Submission

📅 DUE DATE	Sep 24
🏷️ STATUS	<input type="radio"/> Not submitted Due at: Tue, Sep 24 12:00 pm

Find your project overviews here!

Predicting Bike-Sharing Data (Your First Neural Network)

Introduction

In this project, you'll get to build a neural network from scratch to carry out a prediction problem on a real dataset! By building a neural network from the ground up, you'll have a much better understanding of gradient descent, backpropagation, and other concepts that are important to know before we move to higher level tools such as PyTorch. You'll also get to see how to apply these networks to solve real

Project Rubric

PROJECT SPECIFICATION

Predicting Bike-Sharing Patterns

Code Functionality

CRITERIA	MEETS SPECIFICATIONS
All code works appropriately and passes all unit tests	All the code in the notebook runs in Python 3 without failing, and all unit tests pass.
Sigmoid activation function	The sigmoid activation function is implemented correctly

Forward Pass

CRITERIA	MEETS SPECIFICATIONS
Forward Pass - Training	The forward pass is correctly implemented for the network's training.

Project Submission Checklist

Project Submission Checklist

Before submitting your project, please review and confirm the following items.

- ☐ I am confident all rubric items have been met and my project will pass as submitted. (If not, I will discuss with my mentor prior to submitting.)
- ☐ Project builds correctly without errors and runs.
- ☐ All required functionality exists and my project behaves as expected per the project's specifications.

Once you have checked all these items, you are ready to submit!

Project Review Process





Project Reviews

- Each technical project must be formally submitted for code review.
- Project reviews can take **up to five days** to receive a project review depending on submission volume; plan ahead and don't leave work until the last minute!
 - If you do not pass a project on the first attempt, you can make changes and **resubmit your project** as many times as needed. There are no penalties for re-submitting a project.
 - If you submit your final project right before the final program deadline and it does not pass, you will **not be able to re-submit the project** if the final program deadline has passed. **(There is only ONE deadline ... and that is September 17th, 2020 for the entire program)**
 - There is no way to “cancel” a submission if you accidentally submit your project prematurely. You will need to wait until the project comes back rejected and marked as “requires changes” to resubmit.

Frequently Asked Questions

Q. Will I be penalized for missing a project deadline?

A. The projects are soft deadlines - no penalties if you miss them! However, we recommend staying as close to them as possible to ensure you graduate by your final program deadline of **September 17th, 2020.**

Q. Am I doing something wrong if my project doesn't pass on the 1st try?

A. Don't be disappointed if your project doesn't pass on the first try. Use it as a learning opportunity. Projects normally take 2-3 submissions before they pass.

Q. When will I receive my Nanodegree certificate?

A. Once you have completed and passed all your projects, you will be prompted to go through the graduation process. Upon graduation, you will receive an electronic certificate that can be accessed through your classroom.

Frequently Asked Questions (Cont.)

Q. How do I graduate?

A. You will graduate once all technical projects have been submitted, *you must complete every technical project in order to graduate - no exceptions!*

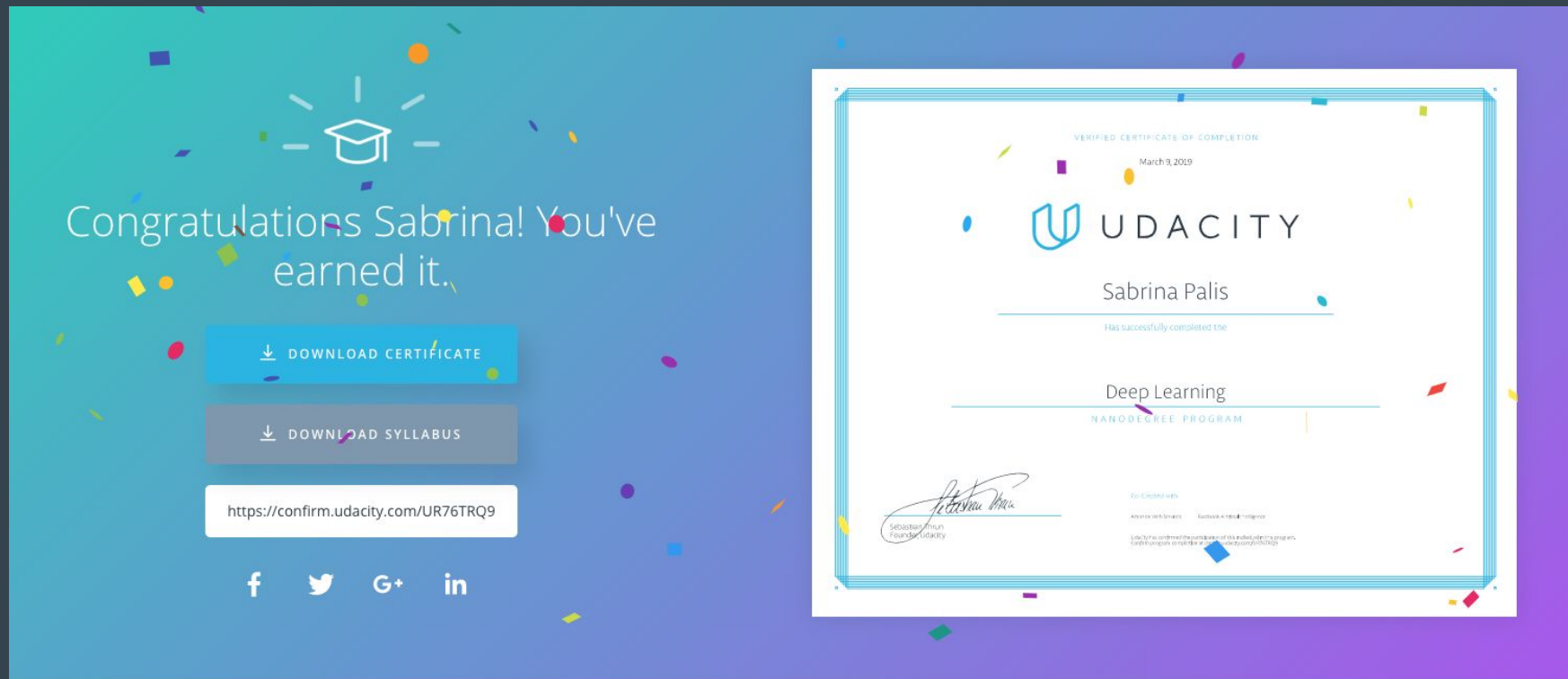
Q. Do I need to complete all concepts and quizzes to graduate?

A. No. You can still graduate even if you skip concepts or quizzes. However, many of these are important in helping you solidify your understanding of the concepts you will apply in the projects, we recommend completing all of them.

Q. Are the concepts and projects in Phase 2 more difficult than in Phase 1?

A. You may find certain projects more difficult than others, and students generally report that Phase 2 is more challenging overall. But remember, you have lots of support from your community and Udacity, so don't give up even if you feel discouraged!

The goal: A Nanodegree Certificate! 🚀



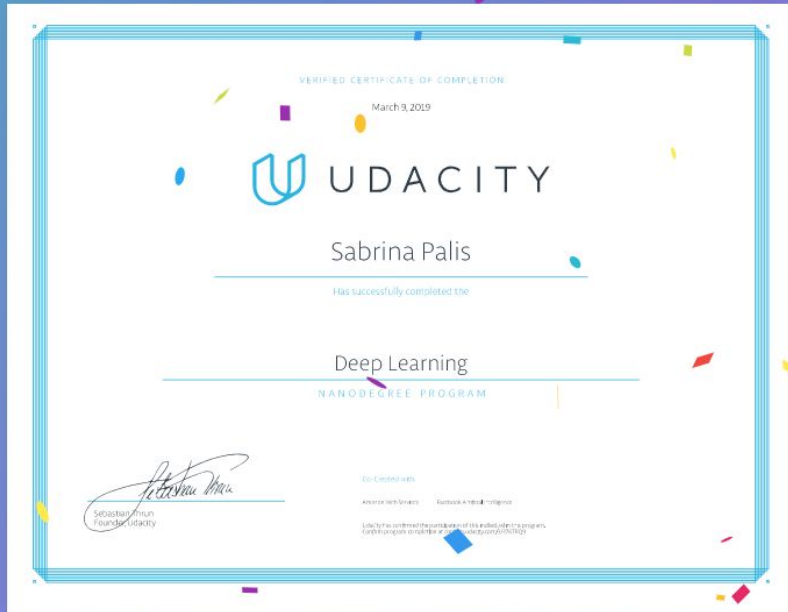
Congratulations Sabrina! You've earned it.

↓ DOWNLOAD CERTIFICATE

↓ DOWNLOAD SYLLABUS


<https://confirm.udacity.com/UR76TRQ9>

f t G+ in



VERIFIED CERTIFICATE OF COMPLETION

March 3, 2019


 **UDACITY**

Sabrina Palis

Has successfully completed the

Deep Learning

NANODEGREE PROGRAM


Sebastian Thrun
Founder, Udacity

Get Connected with:
LinkedIn: [sebastianthrun](#) Facebook: [udacity](#)

Udacity has confirmed the completion of this verified learning program.
Certificate program number: [udacity.com/confirm/UR76TRQ9](#)

Plagiarism and Academic Honesty



Academic Honesty

Udacity takes academic honesty and plagiarism very seriously. For a comprehensive overview and examples of what constitutes academic dishonesty, visit the [Udacity Support](#) page.

Plagiarism in any form is a violation of the [Udacity Honor Code](#). If after review of the suspected plagiarism, Udacity determines that the work is not your own, you will be notified and the submission will be rejected. **If you break the Udacity Honor Code, you may face expulsion from your Nanodegree program or the Udacity platform**, or have your graduation credential revoked if plagiarism is discovered after you graduate.

It is **YOUR** responsibility to know what constitutes plagiarism. Unsure? Ask your peers or a Student Hub Community Manager before submitting a project.

What Counts as Academic Dishonesty?

Copying another person's code verbatim and submitting it in a project



YES

Copying code or using code that has been provided for you and approved for use in your project by Udacity



NO

Working on a project with a peer, writing code together that overlaps, and submitting it as two separate projects



YES

Using someone else's code and providing the name of the person it belonged to as credit to their work

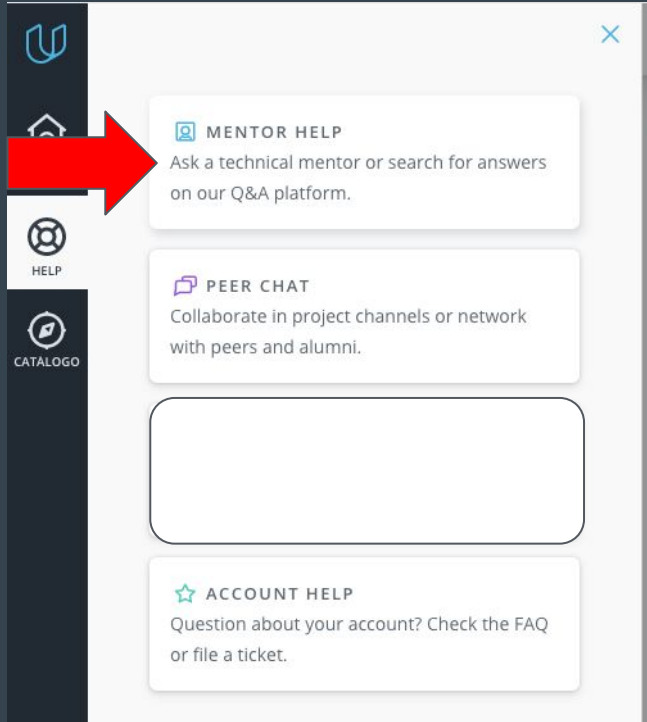


YES

Phase 2 Resources



Knowledge

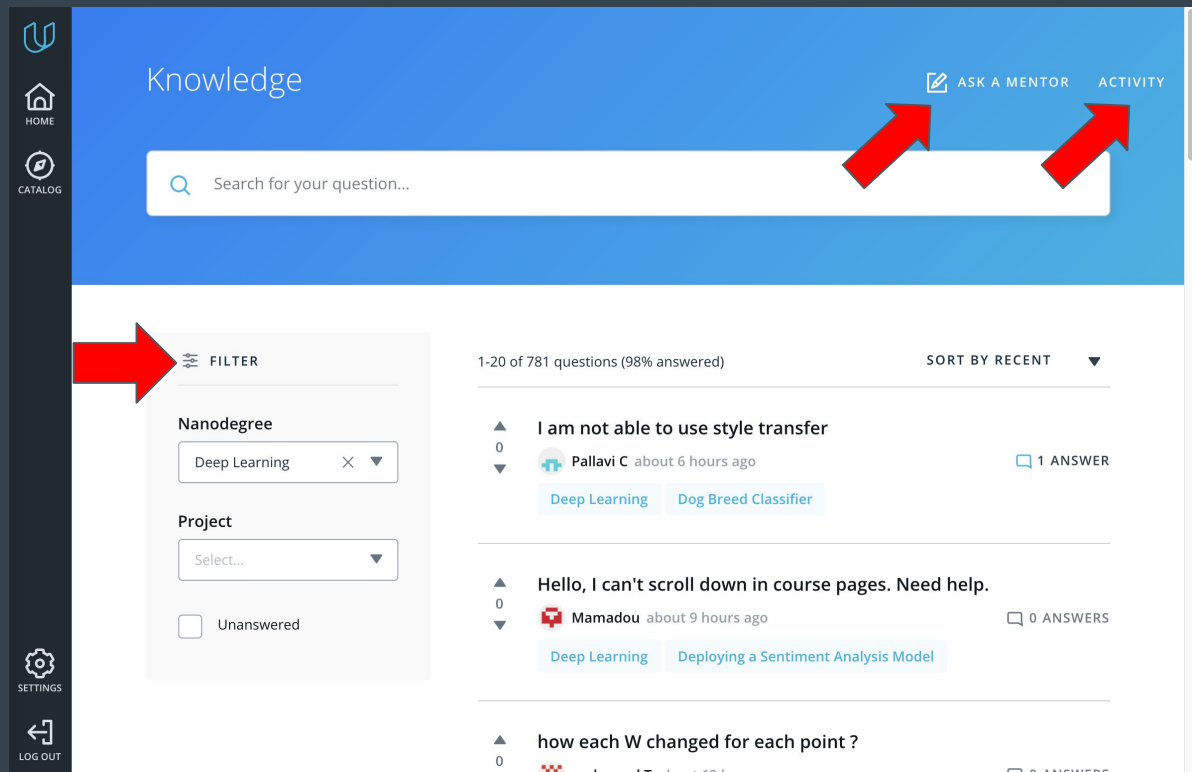


THINGS TO KNOW:

- Knowledge is your one-stop shop for any and all help.
- Access Knowledge by clicking “Mentor Help” under the Help section in your classroom!
- Reply times are fast! Usually within a couple of hours
- Think of this tool like an online Live FAQ where you can get answers to technical questions.

Knowledge (Cont.)

Knowledge is designed to assist you with your technical questions! Open 24/7 — Mentors are here to help you!

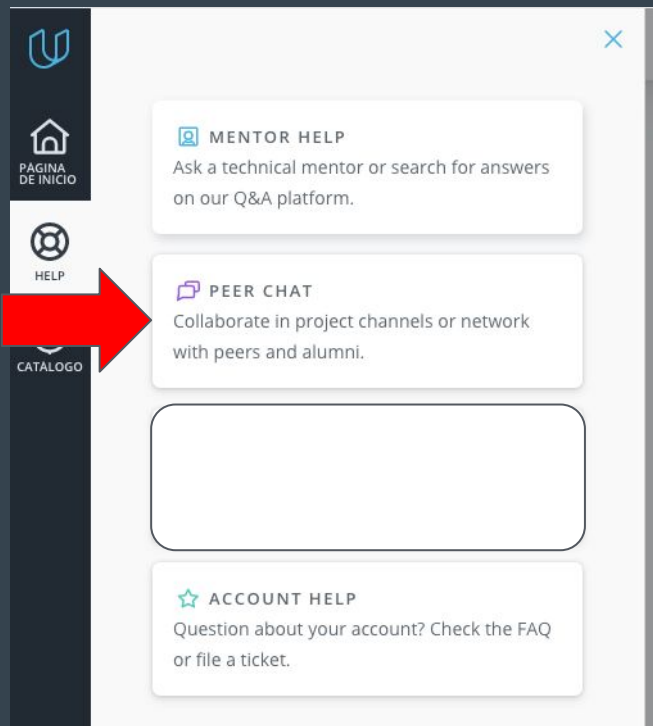


But how do I use it?

- You can ask a Mentor any question by clicking the “Ask a Mentor” button.
- View your archived Q & A's in the “Activity” section.
- Always be resourceful!
 - Use the filter to search and ask for questions before asking a mentor. Someone most likely has already asked!

Student Hub

The in-classroom chat platform that connects you with fellow students



THINGS TO KNOW:

- Student Hub is your replacement for your Phase 1 Slack Community space
- Access Student Hub by clicking “Peer Chat” under the Help section in your classroom!
- There are a few main Community Channels
 - 30 Days of Udacity
 - Careers
 - Community Office Hours
 - Project Channels

Student Hub (30 Days of Udacity)

Chat

30 Days of Udacity **Click here to access the 30 Days webpage!**

JUMP TO RECENT

hello everyone! I'm excited to be here. I am a Marketing Manager at Gatsby. I'm in this nanodegree so I can work closer with our product team

Leon T. 6:52 PM
Day 5 of the challenge. Day 14 in the course. I started the first project in Machine Learning today. (How far off of a good pace is that?) I will build a model to help a non-profit organization find donors. I anticipate some challenge in finding a way to check the correctness of my solution as I proceed.

Daniel C. 6:58 PM
Day #19 on Programming for Data Science - Finally done with "Data Cleaning on SQL". I am reviewing the whole lesson again tomorrow because I still feel like I need to learn more before moving on. CONCAT, CAST, COLECASE, etc... are getting to be more of a pain than i thought 😊. I will keep working hard on it though! 🙌🔥 After I nail "Data Cleaning on SQL" I have two more lessons to go before my very first project. Can't wait 😊. I bit nervous but I will not let it discourage me 🙌. #SQL #datascience #30daysofudacity #justkeepcoding

Leon T. 7:01 PM
I am impressed by your ambition, @HaidaraliNadirS ! Can you tell us something about the work of a data engineer @QingyuanM ? I, like about a million other professors, am racing to make myself ready to teach online for the first time. My college, like many others, has sent students home in any effort to slow the spread of illness.

Zed Z. 7:43 PM

30 Days of Udacity is very similar to what we did during Phase 1 with 60 Days of Udacity:

- Pledge to study for 30 days and document your journey in this channel every day
- Take the pledge at bit.ly/30Pledge
- Learn more at bit.ly/30-days-of-udacity

Student Hub (Careers)

Chat

HOME

CATALOG

COMMUNITIES

30 Days of Udacity

Careers

Community Office Hours

Data Analyst

PEER PROJECT HELP

INTRODUCTION TO MACHINE LEARNING WITH TENSORFLOW

Finding Donors for CharityML

Create Your Own Image Classifier - TensorFlow

Creating Customer Segments with Arvato

DIRECT MESSAGES

Myles C

VIEW 1 CONVERSATION

SETTINGS

Careers

JUMP TO RECENT

Hi All i am new here, I just started my Machine Learning Nanodegree program, I would love to get an internship in Machine Learning or Data Science, Here is my LinkedIn account if you want to connect i am Based in New York City, U.S

<https://www.linkedin.com/in/omar-m-hussein-3862a6149/>

YESTERDAY

Olivia S. 12:24 AM

Hi all! My name is Olivia and I am taking Business Analytics course to start my career transition journey to be a data analyst in Australia. I would love to get advise from anyone in the industry :). Please connect with me here! (www.linkedin.com/in/olivia-seo-seonyoung)

1 Reply Latest reply 1 day ago

Samar N. Staff 12:56 AM

Hey Guys! we have a career webinar tomorrow, March 17 at 11:30am CST (Chicago Time). The career coach - Angela Mcdonald be talking about strategies for a career transition. I encourage everyone to participate - https://www.udacity.com/events/event/jumping_ship_career_transitions

1 Reply Latest reply 1 day ago

Diane V. Staff 6:31 AM

Hey good day everyone! I am here in the career channel to answer your career related questions for the next hour, 5:30 am - 6:30 am PST. Ask away!

1 Reply Latest reply 1 day ago

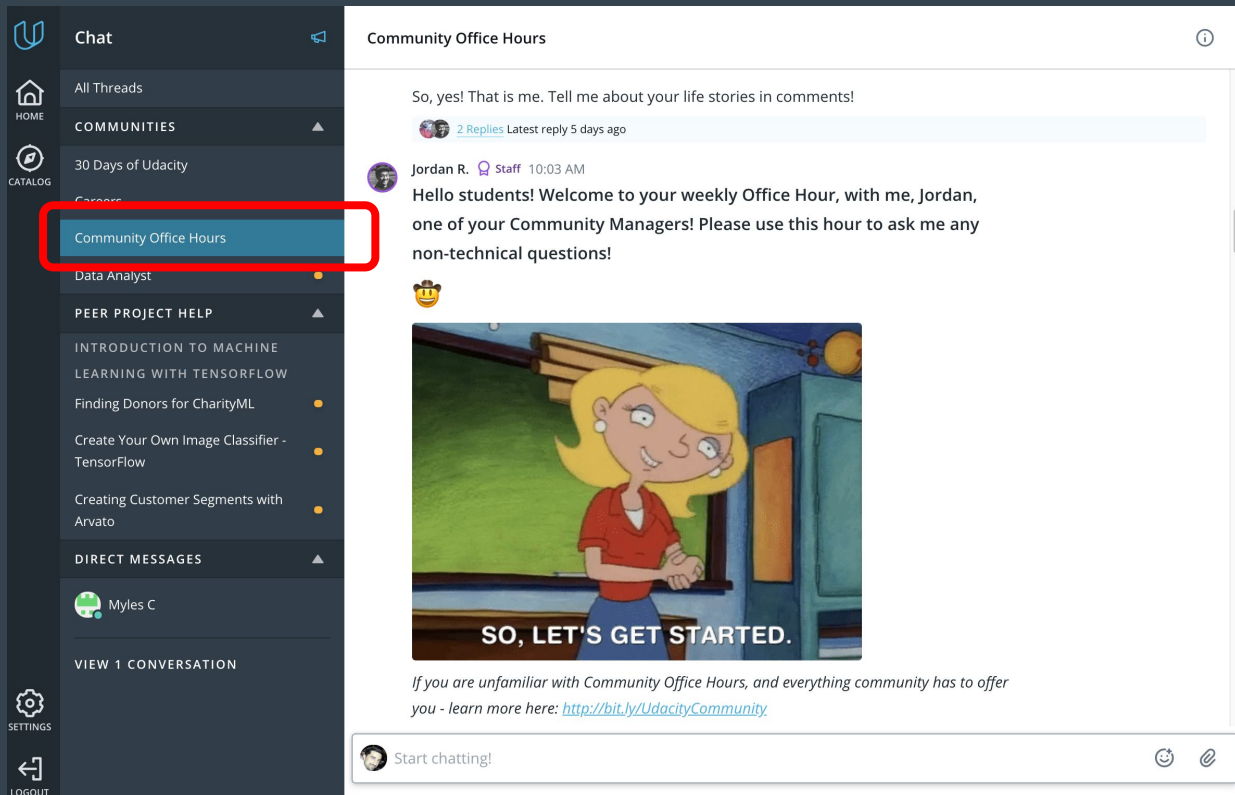
Start chatting!

For Udacity career coaching, webinars, events, and anything related to job search support.

- Look for **staff in Student Hub** like Samar to post about career webinars and events!

Student Hub (Community Office Hours)

Connect with classmates from every Nanodegree program and stay informed with announcements from your Community team!



The screenshot shows the Student Hub interface. On the left is a dark sidebar with navigation options: Chat, All Threads, COMMUNITIES, 30 Days of Udacity, Career, Community Office Hours (highlighted with a red box), Data Analyst, PEER PROJECT HELP, INTRODUCTION TO MACHINE LEARNING WITH TENSORFLOW, Finding Donors for CharityML, Create Your Own Image Classifier - TensorFlow, Creating Customer Segments with Arvato, DIRECT MESSAGES, Myles C, and VIEW 1 CONVERSATION. At the bottom of the sidebar are icons for SETTINGS and LOGOUT. The main content area is titled 'Community Office Hours' and contains a post from Jordan R. (Staff) dated 10:03 AM. The post says: 'Hello students! Welcome to your weekly Office Hour, with me, Jordan, one of your Community Managers! Please use this hour to ask me any non-technical questions!' Below the text is a cartoon image of a blonde woman in a red shirt and blue skirt standing at a counter, with the text 'SO, LET'S GET STARTED.' at the bottom. Below the image is a link: 'If you are unfamiliar with Community Office Hours, and everything community has to offer you - learn more here: <http://bit.ly/UdacityCommunity>'. At the bottom of the main area is a 'Start chatting!' button.

Community Office Hours happen twice a week!

Every Tuesday with Prerona S.
9:30 - 10:30 PM PDT
Wed., 4:30 - 5:30 AM GMT
Wed. 10 AM - 11 AM IST

Every Thursday with Jordan R.
10 - 11 AM PDT
6 - 7 PM GMT
11:30 PM - 12:30 AM IST

Student Hub (Project Channels)

Connect with all students in your Nanodegree program

The screenshot shows the Student Hub interface. On the left is a dark sidebar with navigation options: Chat, HOME, CATALOG, and SETTINGS. Under CATALOG, there are links for 30 Days of Udacity, Careers, Community Office Hours, and Data Analyst. The 'Data Analyst' channel is selected, showing a list of project topics under 'PEER PROJECT HELP', including 'INTRODUCTION TO MACHINE LEARNING WITH TENSORFLOW' and 'Finding Donors for CharityML'. A red circle highlights this section. The main chat area on the right shows messages from Simone D., Juan Daniel A., and Jane P. A red arrow points to the channel information icon (a circle with an 'i') in the top right corner of the chat area.

Under the Channel Information you can access helpful links and project descriptions

- In the member lists, you can find your peers
- Find people who have passed that particular project with a green check mark added to their names in the right panel)

 Arun P.



Advice from Past Udacity Graduates!



Top 10 Tips for Finishing Early

1. Rely on the Community
2. Take notes
3. Take short breaks
4. Study a few hours every day
5. Remember why you are here
6. Manage your time
7. Focus on concepts
8. Refuel
9. Keep moving when it gets hard
10. Focus on projects!

You've got this!

TOP 10 TIPS TO FINISH EARLY

- 1 RELY ON THE COMMUNITY**
TAKE NOTES 2
"Handwritten notes help you commit more information to memory and make the material easier to understand." **_Maxwell Martin**
TAKE SHORT BREAKS 3
"I take breaks as a reward for my work." **_Victor Babaniyi**
"Use the Pomodoro technique. Study in intervals of 25 minutes followed by 5 minutes breaks." **_Carlo David**
- 4 STUDY A FEW HOURS EVERY DAY**
"Be input oriented and not output oriented. Don't say: 'I will finish lesson 2 today.' Say: 'I will study 2 hours today.'" **_Carlo David**
- 5 REMEMBER WHY YOU ARE HERE**
"Remind yourself of how happy you were when you got selected for this opportunity and hold on to that feeling." **_Calincan Mircea Ioan**
- 6 MANAGE YOUR TIME**
"Make 'Have to do', 'Should do' and 'Want to do' lists and go through them in that order." **_Yaroslav Porshnev**
"Turn off distracting apps and focus on studying." **_Marek Przybyłowicz**
- 7 FOCUS ON CONCEPTS**
"Don't get stuck up on details. Try to get general understanding of the problem." **_Marianna Janczak**
"You don't need to remember all the codes or formulas. Just understand the concepts behind them and know how they work." **_Mohamed Nagy**
- 8 REFUEL**
"Sleep, socialize, watch TV, exercise, refuel! With the course, go all in, but remember: you can't go anywhere without fuel." **_Anna Unger**
- 9 KEEP MOVING WHEN IT GETS HARD**
FOCUS ON PROJECTS 10
"Don't get stuck on any topic. If you don't understand something, try moving on and come back later." **_Sara Lane**
"If you don't understand a topic, don't panic. Go back 1 or 2 videos." **_Florin Cioloboc**

"You were one of the lucky applicants to be selected from [thousands of] people so we know you have what it takes!" **_Brenda [Udacity Community Manager]**

Let's wrap it up...!

When does Phase 2 end?

The deadline for completing the Nanodegree Program is **September 17th, 2020**

Do I need to complete all the coursework?

Yes, if you want to graduate. All coursework must be complete by **September 17th, 2020**

Best of luck everyone!!



Q&A

