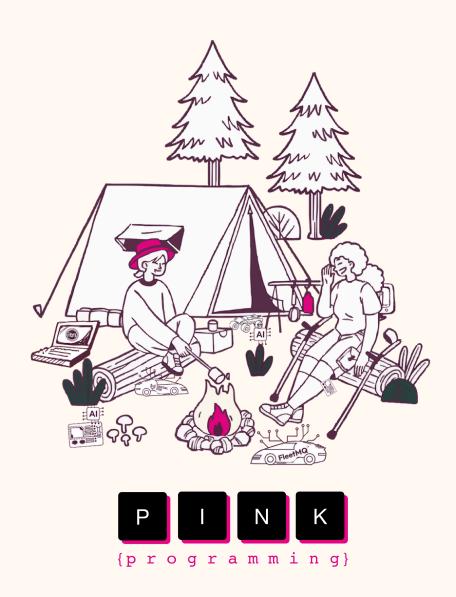
# Information pack Robotics & AI Camp 2025

23 - 27 Aug 2025



Camp supporters







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# Practical information

# Communication

To keep in touch before, during and maybe even after the camp, we'll be using <u>Slack</u>. It is advised to download the application as this will be our main channel for communication. Slack is a messaging app for communication and information sharing. There are several channels in Slack which we will use to share information on various topics.

### Start off by:

Creating a Slack account
Joining the camp workspace Pink Programming Robotics & Al Camp
Introducing yourself in channel #introductions-n-social, e.g., with name, pronouns
city, occupation, interests, and something you're either excited about or looking
forward to about the camp $\stackrel{*}{\rightarrow}$

While there, have a look around in Slack to see what channels there are and start connecting with the others! E.g., visit #travels to coordinate your trip and maybe carpool with others, or send us your your cutest pet picture in #random!

Reach out at campmanager@pinkprogramming.se if you have issues signing up or joining the workspace, and if you have other questions you can find us on Slack!

# 🗓 Travel

# **Camp dates**

The camp officially kicks off on the 23rd of August at 14:00, but we'll start things slow so feel free to arrive anytime before 15:00 until then we'll mingle and for lunch we'll be providing a light meal.

On the 27th of August, we'll check-out and then have final presentations, a competition and certificate ceremony, as well as a quick wrap-up before leaving at 13:00 after, yes - a light lunch!



### **d** Getting to the venue

Getting to the venue by public transportation is simple. The closest stop is Ängelholm Station and from there it's just a short 6 min walk to where we're staying.

If you travel by car you should be able to get a parking spot without any issues as the venue has its own parking lot fitting approx. 14 cars.

Location: <u>Ängelholms Vandrarhem</u> (Landshövdingevägen 2, 262 52 Ängelholm)

#### **Accommodation**

We will be living at <u>Ängelholms Vandrarhem</u>, with nature and sea close by. The address is Landshövdingevägen 2, 262 52 Ängelholm (<u>Google maps</u>).

# Summer activities

During the camp, we will be spending some of the time doing activities such as visiting the beach, having walks, game nights, etc. The activities are voluntary and if there is any specific activity you wish for us to do, you are welcome to drop the suggestion in your reply to the question about camp expectations in the technical information form further down in section "Technical information" of this information pack.

We will have at least one board game night so bring all your favourite games that fit in your bag, both indoor games and outdoor games will make fun summer memories. If you don't have any board games, no worries, and if you know any games such as The Traitor Game (a social deduction game), it'd be amazing if you'd teach the rest of us how to play.

# What to bring

☐ Towels (beach and bathroom)
☐ Bed linen (duvet cover, pillow case and under sheet)
☐ Toiletries
$\ \square$ A laptop with full admin rights for software installations—make sure <b>external USE</b>
sticks can be used and are not blocked by the system
☐ Phone
☐ Chargers (laptop + phone)
☐ Cozy clothes
☐ Casual (Swedish "oömma") clothes for outdoor activities such as light hiking



Comfortable shoes
Board game(s)/summer games if you have
Swimming clothes
Good mood!

### Food

We will prepare breakfast, lunch and dinner together in teams of 5, which will be announced upon arrival. The meals will be pre-planned and groceries will be delivered to you, so no need to think about what you'll cook. There will also be fruit and snacks available. You are welcome to bring your own snacks if you wish and if it's something you think a lot of people would like you are welcome to drop the snack suggestion in your reply to the question about camp expectations in the technical information form further down in section "Technical information" of this information pack.

# Technical information

To get the most out of this robotics and AI camp, we kindly ask you to do the following preparations. If any of the steps are hard to follow you can reach the camp teacher and mentor (Elisa, Annika, Silvia and Ancy) over on Slack to ask them questions. We will also have a small "tech party" the evening of arrival in case there are any issues requiring hands-on assistance—but please do as many of the steps prior to arrival as there will not be enough time to help everyone set it up from scratch.

# Please fill out the following form.

Please let us know what operating system your computer runs (Windows, macOS, Linux, etc.) so we can prepare as much as possible for the camp. Fill out this form: <a href="https://forms.gle/AmaHAH6oIrAuv4XRA">https://forms.gle/AmaHAH6oIrAuv4XRA</a>

# Tech preparation for "Cars sessions"

You'll get to know what a "car session" is at the camp, for now all you need to know is that if you have any questions about any of these steps, reach out to Elisa (teacher), Annika (teacher) or Ancy (mentor) on Slack.



Step-by-Step Guide: Set Up Google Colab in Google Drive

#### Step 1: Check if Colab is Already Available

- 1. Go to Google Drive.
- 2. Click the "+ New" button on the top left.
- 3. Hover over "More" at the bottom of the dropdown.
- 4. Look for "Google Colaboratory" in the list.
- If you see it: You're all set! You can create a new Colab notebook from here.
- X If you don't see it: Follow the steps below to install it.

#### Step 2: Install Google Colab in Google Drive

- 1. Still in the "More" menu (from Step 1), click "Connect more apps" at the bottom.
- 2. In the search bar that appears, type "Colab".
- 3. Click on "Colaboratory" (by Google).
- 4. Click the **Install / Connect** button.
- 5. Once done, go back to **New > More**, and now you should see **Google Colaboratory**.

#### Step 3: Create Your First Notebook

- 1. In Google Drive, click **New > More > Google Colaboratory**.
- 2. A new tab will open with a ready-to-use notebook.
- 3. Rename the notebook if you like, and start coding!

# Step-by-Step Guide: Create a GitHub Account

#### Step 1: Go to GitHub

1. Open your browser and go to: <a href="https://github.com">https://github.com</a>

#### Step 2: Sign Up

- 1. Click the "Sign up" button (top-right corner).
- Enter your email address and click "Continue".
- 3. Choose a **password** and click "Continue".
- 4. Pick a **username** (this will be your GitHub handle).
- 5. Choose if you want to receive updates via email, then click "Continue".
- 6. Complete the **puzzle/captcha** to prove you're human.



#### Step 3: Verify Your Email

- 1. Check your inbox for a message from GitHub.
- 2. Click the "Verify email" button in the email.

#### Step 4: Choose Your Plan

- 1. Select the **Free plan** (this is enough for most users).
- Click "Continue".

#### Step 5: Personalize (Optional)

- 1. GitHub may ask about your experience level and interests.
- 2. You can skip this or fill it in—your choice.
- 3. Click "Submit" or "Complete setup" when done.
- Step-by-Step Guide: Install Docker Desktop

Windows: Install Docker Desktop

Step 1: Check if Docker is Already installed and your Windows version

- 1. Press **Start**, type cmd, and open Command Prompt.
- 2. In the terminal, type:

docker --version

If you see something like:

Docker version 26.1.3, build abc123

Then Docker is already installed — no need to install again.

If it says:

'docker' is not recognized as an internal or external command

Then continue with the installation steps below.

- 3. Press Windows Key + R, type winver, press Enter.
- 4. If it says Windows 10 version 1903 or higher, you're good.

#### Step 2: Enable WSL 2 (Windows Subsystem for Linux)

- 1. Open the Start Menu.
- 2. Type PowerShell, right-click on Windows PowerShell, and choose **Run as** administrator.
- 3. Paste the following command:

wsl --install



- 4. This will install WSL and restart your computer.
- 5. If this doesn't work, go to:

https://learn.microsoft.com/en-us/windows/wsl/install-manual

#### Step 3: Download Docker Desktop

- 1. Go to: <a href="https://www.docker.com/products/docker-desktop/">https://www.docker.com/products/docker-desktop/</a>
- 2. Click the "Download for Windows (WSL2)" button.

#### Step 4: Install Docker

- 1. Double-click the .exe file you downloaded.
- 2. In the installer:
  - a. Make sure "Use WSL 2 instead of Hyper-V" is checked.
  - b. Click **OK** to proceed with the installation.
- 3. Restart your computer if asked.

#### Step 5: Start Docker Desktop

- 1. After restart, Docker should start automatically.
- 2. Look for the whale icon in your system tray (bottom right corner).
- 3. If not running, open Docker Desktop from the Start Menu.

#### Step 6: Verify Installation

- 1. Open the Start Menu  $\rightarrow$  type cmd  $\rightarrow$  open Command Prompt.
- 2. Type:

#### docker --version

3. If it prints something like

Docker version 26.x.x

Docker is installed!

#### macOS: Install Docker Desktop

#### Step 1: Check if Docker is Already installed and Your Mac Type

- 1. Open Terminal (press **Command + Space**, type Terminal, press **Enter**).
- 2. Type:

#### docker --version

If you see a version message, like:

Docker version 26.1.3, build abc123



Docker is already installed.

If you see:

command not found: docker

Docker is not installed — continue with the steps below.

- 3. Click the **Apple** icon  $\rightarrow$  About This Mac.
- 4. See if it says **Apple M1/M2** or **Intel**. You'll need the right version of Docker for your chip.

#### Step 2: Download Docker Desktop

- 1. Go to: <a href="https://www.docker.com/products/docker-desktop">https://www.docker.com/products/docker-desktop</a>
- 2. Click **Mac with Apple chip** or **Mac with Intel chip** depending on your system.

#### Step 3: Install Docker

- 1. Open the .dmg file you downloaded.
- 2. Drag the Docker icon into the Applications folder.
- 3. Open Docker from Applications.

#### Step 4: Give Permissions

- 1. The first time Docker runs, it might ask for your password or system permissions.
- 2. Click **OK** or Allow to all prompts.

#### Step 5: Verify Installation

- 1. Open Terminal (press **Command + Space**, type Terminal, press **Enter**).
- 2. Type:

docker --version

3. You should see something like:

Docker version 26.x.x

Linux (Ubuntu Example): Install Docker Engine

This is for Ubuntu 20.04+, one of the most popular Linux distributions.

#### Step 1: Open the Terminal and check if Docker is Already installed

- Press Ctrl + Alt + T to open the Terminal.
   All the steps below involve commands that you'll type or paste into this terminal, then press Enter to run each one.
- 2. Type:



#### docker --version

You will either see something like:

Docker version 26.1.3, build abc123

→ Docker is already installed.

Or:

Command 'docker' not found

→ Docker is not installed — continue with the steps below.

#### Step 2: Install Required Tools

1. First, update your package list:

sudo apt update

2. Then upgrade any existing packages (optional but recommended):

sudo apt upgrade -y

3. Now install the tools Docker needs:

sudo apt install -y ca-certificates curl gnupg

#### Step 3: Add Docker's Official GPG Key

1. This key ensures you're downloading Docker from a trusted source. Create a folder to store trusted keys:

sudo install -m 0755 -d /etc/apt/keyrings

2. Download Docker's GPG key and save it:

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | \ sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg

#### Step 4: Setup Docker's Repository

1. This tells Ubuntu to install Docker from Docker's official servers:

echo \
"deb [arch=\$(dpkg --print-architecture)
signed-by=/etc/apt/keyrings/docker.gpg] \
https://download.docker.com/linux/ubuntu \
\$(lsb\_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

#### Step 5: Install Docker Engine

1. Update the package list again (now that Docker's repo is added):

sudo apt update



2. Then install Docker and related tools:

sudo apt install -y docker-ce docker-ce-cli containerd.io \ docker-buildx-plugin docker-compose-plugin

#### Step 6: Test Docker

1. Run the following to make sure Docker is working:

sudo docker run hello-world

If it prints a message like "Hello from Docker!", it's working!

#### Step 7: (Optional) Use Docker without sudo

1. To avoid typing `sudo` every time, run:

sudo usermod -aG docker \$USER

#### Then either:

- Log out and log back in
- Reboot your computer
- Or run this in your terminal:

newgrp docker

#### Tech preparation for "Electronics sessions"

You'll get to know what an "electronics session" is at the camp, for now all you need to know is that if you have any questions about any of these steps, reach out to Silvia (teacher) or Ancy (mentor) on Slack.

# 🚇 Install Mu editor

Download and install the Mu editor <a href="https://codewith.mu/">https://codewith.mu/</a>. If you prefer using VS Code as the editor, you can install the **CircuitPython v2** extension (make sure it's v2 by *wmerken* as the older version is deprecated).

# Install PuTTY

Having a serial console application is essential, therefore installing PuTTY as a backup is a good idea <a href="https://www.putty.org/">https://www.putty.org/</a>.



# Contact information

If you're having any problems joining the <u>Slack workspace</u>, don't hesitate to let us know through an email to <u>campmanager@pinkprogramming.se</u>! If you have any other questions or thoughts, please send a message on Slack—we'll be happy to help you! Slack is where you reach us the fastest.

We are looking forward to meeting you at the camp and can't wait to get started and together dive into robotics and AI and we hope you are just as excited! 👫 🔭

