



Comment créer un objet 3D et l'imprimer sur la uDeltaRework du club

Patrick Rioche

Club Ailes Plessiaises

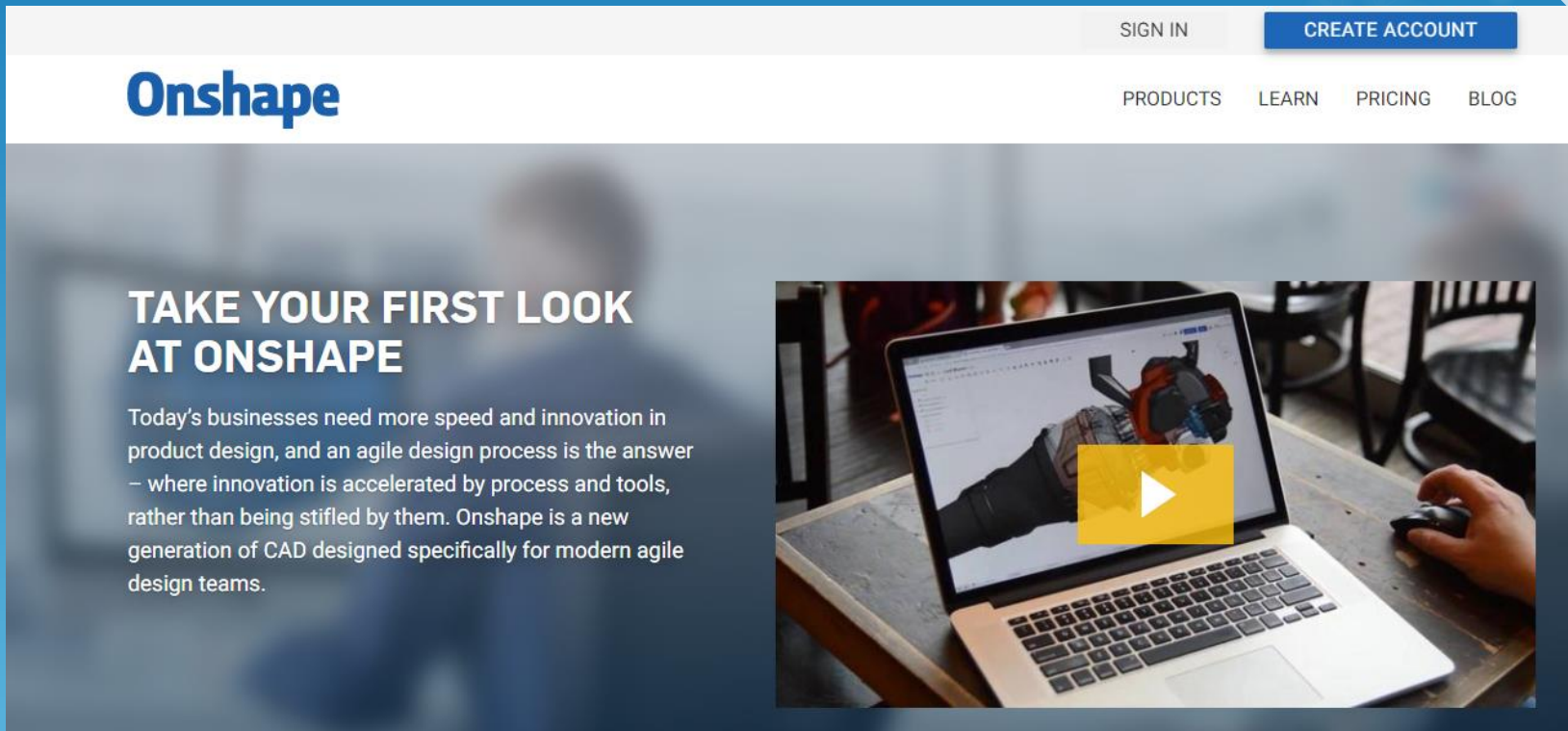


Les logiciels nécessaires

- **OnShape** pour la création des fichiers .STL
 - Version Cloud
 - Lien : <https://www.onshape.com>
- **Repetier** pour préparer l'impression 3D et la mettre sur une carte SD format .gcode
 - Version : 1.6.2
 - Lien : <https://www.reprap-france.com>



Créer un compte sous OnShape



The image shows a screenshot of the OnShape website. The header is white with the OnShape logo on the left. On the right side of the header, there are links for 'SIGN IN' and 'CREATE ACCOUNT' (the latter is highlighted in a blue button). Below these are links for 'PRODUCTS', 'LEARN', 'PRICING', and 'BLOG'. The main content area has a dark blue background. On the left, there is a section titled 'TAKE YOUR FIRST LOOK AT ONSHAPE' with a paragraph of text. On the right, there is a video player showing a person using a laptop with a 3D model on the screen, overlaid with a yellow play button.

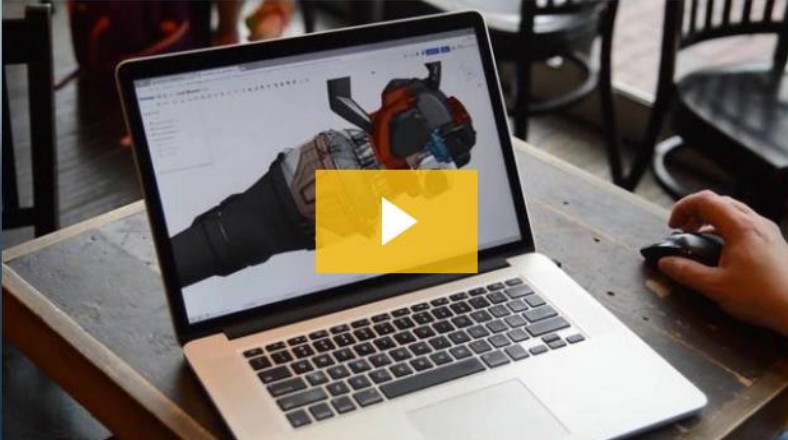
Onshape

[SIGN IN](#) [CREATE ACCOUNT](#)

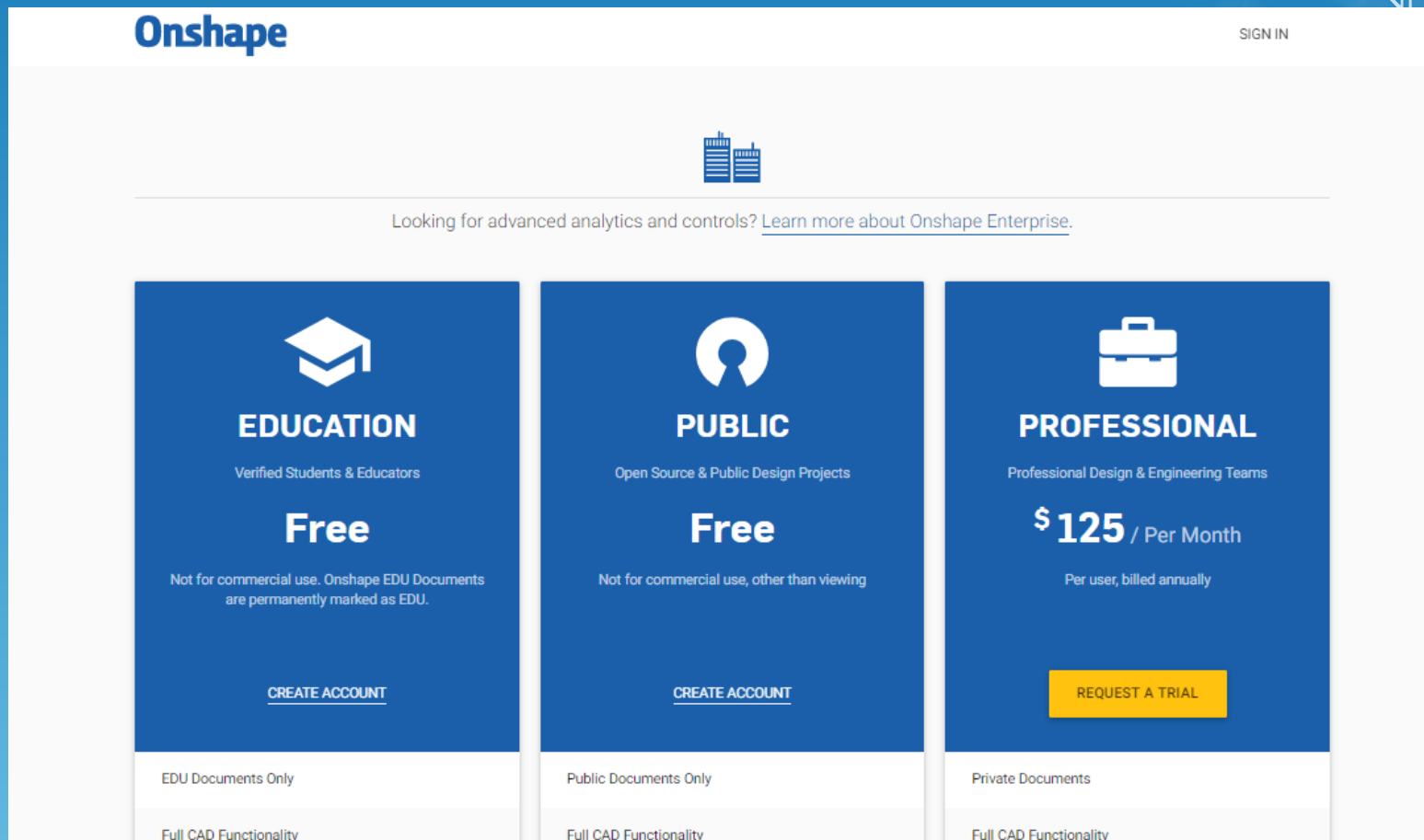
[PRODUCTS](#) [LEARN](#) [PRICING](#) [BLOG](#)

TAKE YOUR FIRST LOOK AT ONSHAPE

Today's businesses need more speed and innovation in product design, and an agile design process is the answer – where innovation is accelerated by process and tools, rather than being stifled by them. Onshape is a new generation of CAD designed specifically for modern agile design teams.






Choisir la version Public



The image shows a screenshot of the Onshape website's pricing page. The background is a solid blue color with several white snowflake icons scattered across it. The page content is white with three blue columns representing different pricing tiers. The Onshape logo is in the top left, and a 'SIGN IN' link is in the top right. A central icon of a building with a person inside is positioned above a line of text that reads 'Looking for advanced analytics and controls? [Learn more about Onshape Enterprise.](#)'

Onshape SIGN IN

Looking for advanced analytics and controls? [Learn more about Onshape Enterprise.](#)

EDUCATION	PUBLIC	PROFESSIONAL
 Verified Students & Educators	 Open Source & Public Design Projects	 Professional Design & Engineering Teams
Free	Free	\$125 / Per Month
Not for commercial use. Onshape EDU Documents are permanently marked as EDU.	Not for commercial use, other than viewing	Per user, billed annually
CREATE ACCOUNT	CREATE ACCOUNT	REQUEST A TRIAL
EDU Documents Only	Public Documents Only	Private Documents
Full CAD Functionality	Full CAD Functionality	Full CAD Functionality

Onshape

Sign up for Onshape's Free Plan

Step 1 Basic contact information

* Prenom ✓

* Nom ✓

* prenom.nom@gmail.com ✓

GET STARTED



Get started Create account Activate email

Already have an Onshape account? [Sign in.](#)

Sign up for Onshape's Free Plan

Step 2 Tell us about how you plan to use Onshape

* CLAP ✓

* Other ▼

* 1 ▼

* Onshape ▼

* No ▼

* Aeromodeliste ✓

* 0600000000 ✓

✓ I'm not a robot



CREATE ACCOUNT



Get started Create account

Onshape

We are sending your activation email to you now.



Please wait (this should take only a minute).

Onshape

Activate your Onshape account!

You're almost there.



Now go check your email.

prenom.nom@gmail.com

Click the link there to activate your account.

Having trouble finding our email?

- Look for an email from alerts@onshape.com.
- Check your spam folder.
- Still can't find it? [Contact us](#).



Get started

Create account

Activate email

Ne pas oublier
d'activer le compte
en cliquant sur
l'email reçu dans
votre messagerie.

Créer un nouveau document

The screenshot shows the Onshape web interface. At the top, there's a search bar and navigation buttons like 'App Store', 'Invite friends', and 'Share'. A notification states: "Your Free subscription only allows editing of public documents. Request a trial of Onshape Professional to create, edit and share private documents." The 'Create' dropdown menu is open, showing options: 'Document...', 'Import file(s)...', and 'Label...'. The 'New document' dialog box is centered, with 'Document name' set to 'SupportServo'. Below the name field are 'Private' and 'Public' radio buttons, with 'Public' selected. A blue banner below the radio buttons reads: "Any Onshape user can view and copy this document." At the bottom of the dialog are 'Create public document' and 'Cancel' buttons. The background shows a 'Recently opened' list with items like 'Vis ABS Main', 'Train Main', 'Ailes-Roues Assemb ... Main', and 'Cabane Main'. A sidebar on the left contains 'Teams', 'Labels', 'Public', 'Tutorials & Samples', and 'Trash'. A 'Document Labels' panel on the right shows 'AERO KAT@NA' and 'Sharing' options.

Onshape

Search in Recently opened

App Store Invite friends Share

Patrick Rioche

Your Free subscription only allows editing of public documents. [Request a trial of Onshape Professional](#) to create, edit and share private documents.

Create

Document... Import file(s)... Label...

Teams Labels Public Tutorials & Samples Trash

Upgrade to Professional

Recently opened

New document

Document name

SupportServo

Private Public

Any Onshape user can view and copy this document.

Create public document Cancel

Document Labels

AERO KAT@NA

Sharing

Public to all users

Created by

me

12:49 PM Jun 10

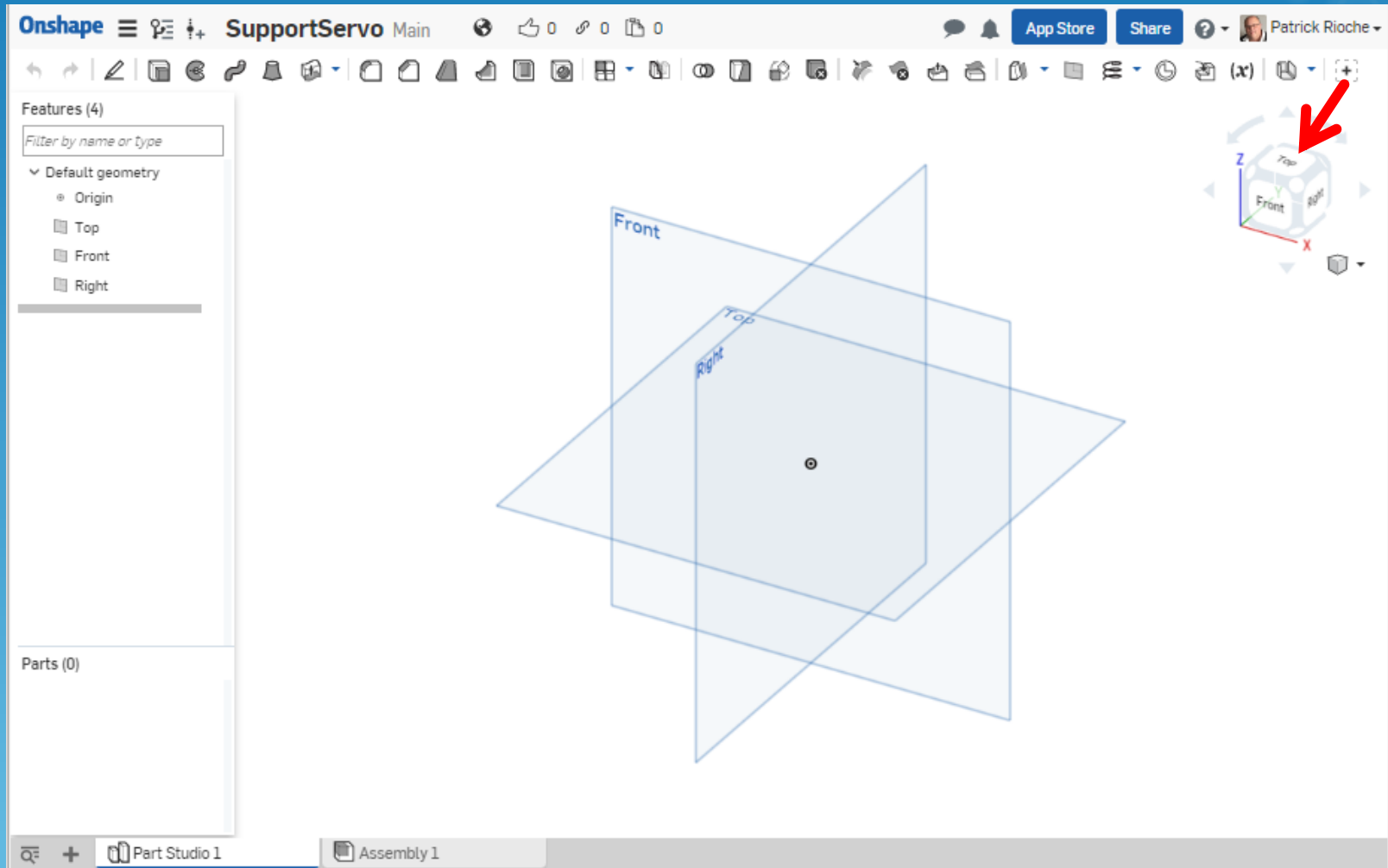
Last modified by

me

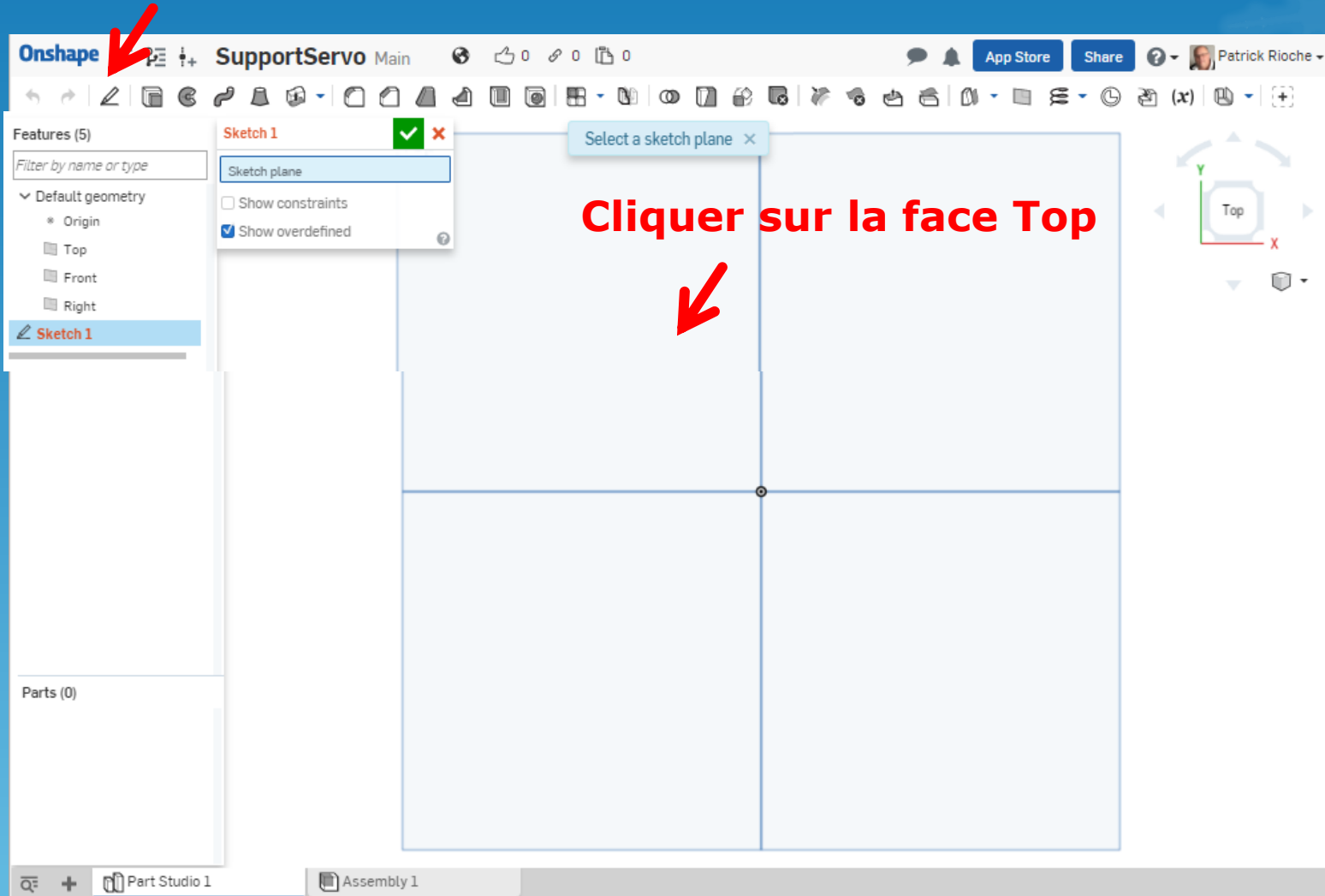
10:28 AM Jun 10

© 2013 - Present, Onshape Inc. All Rights Reserved. Terms & Privacy (1.66.19034.c1547e649e5f)

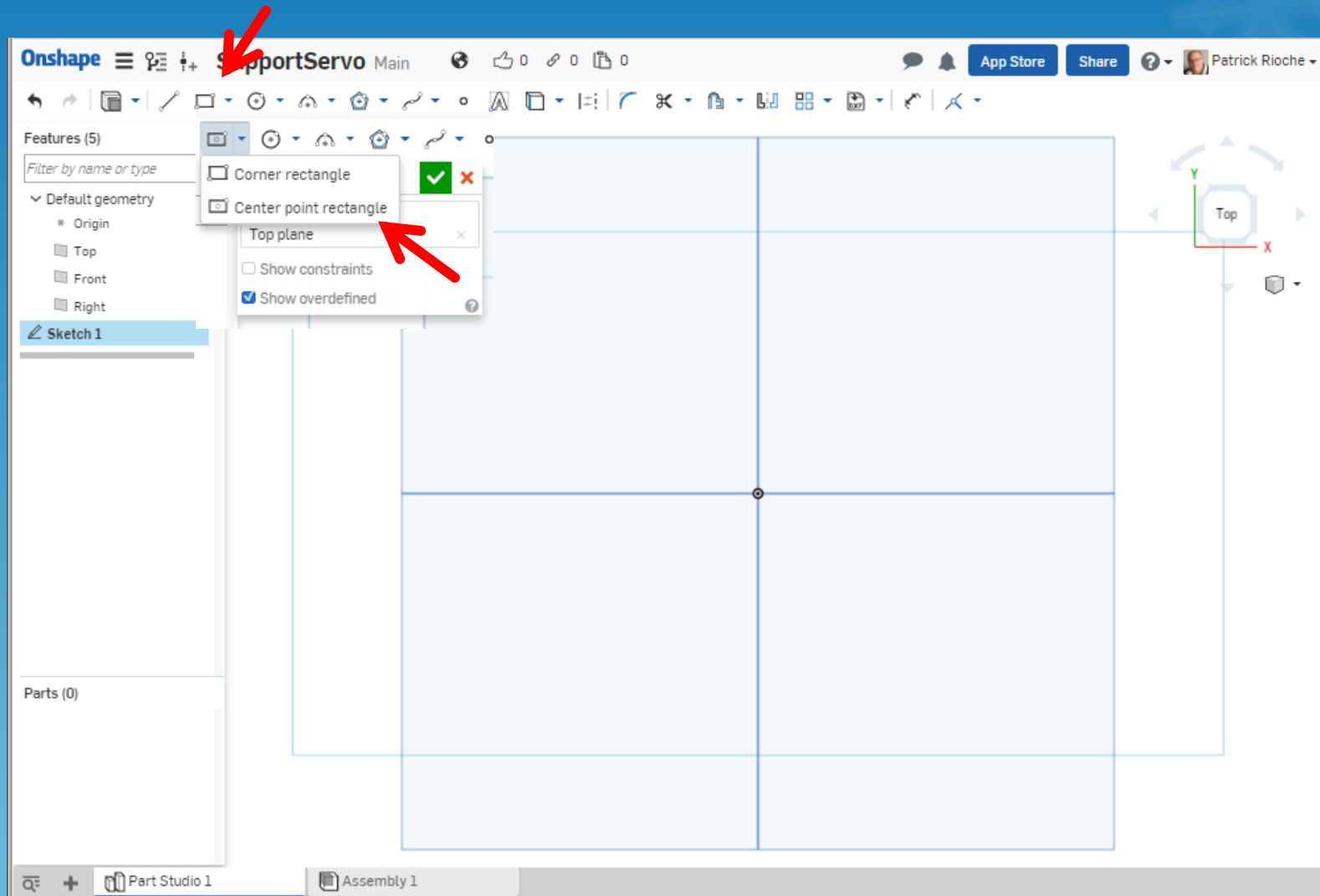
Cliquer sur Top



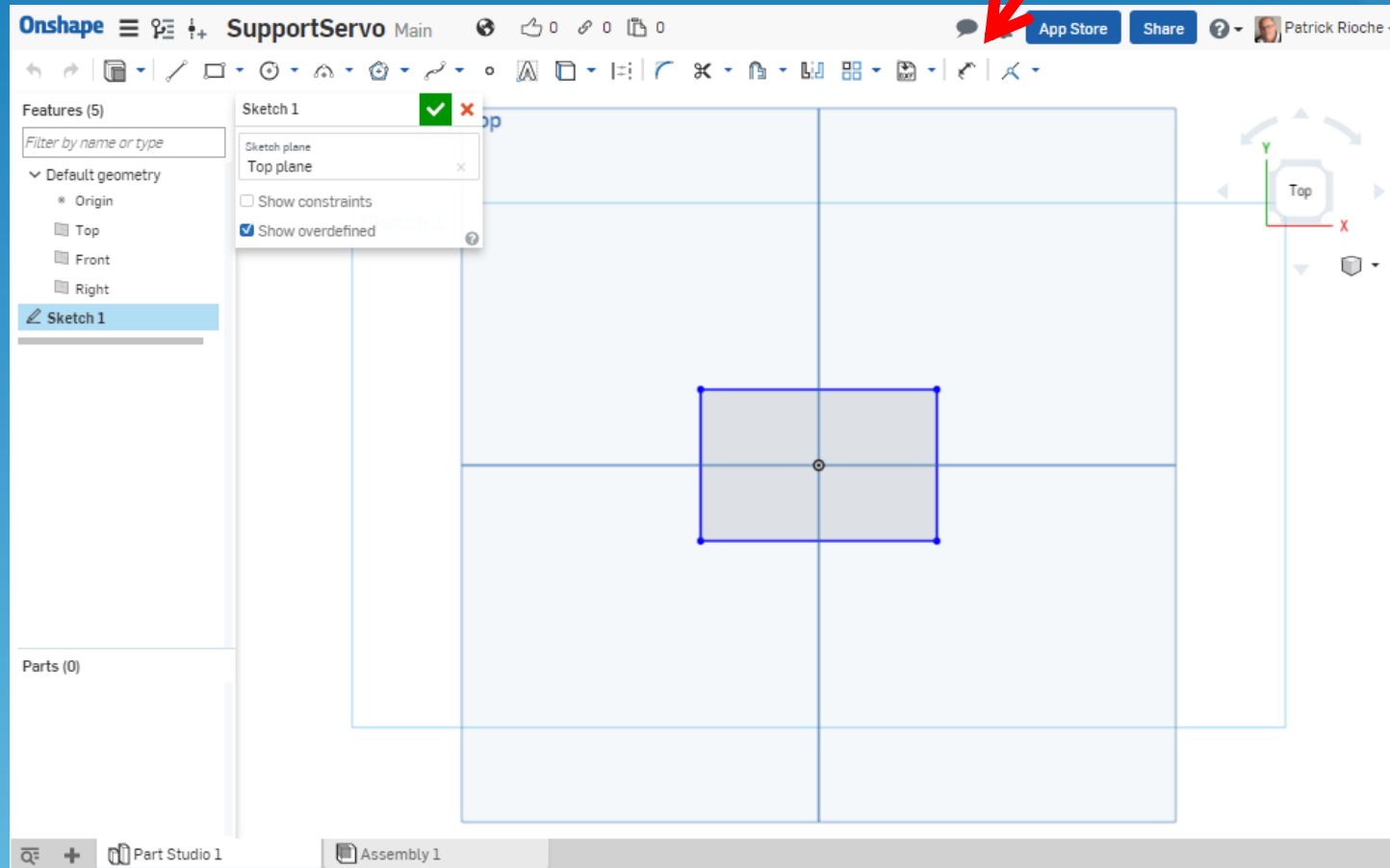
Créer un Sketch (dessin rapide)



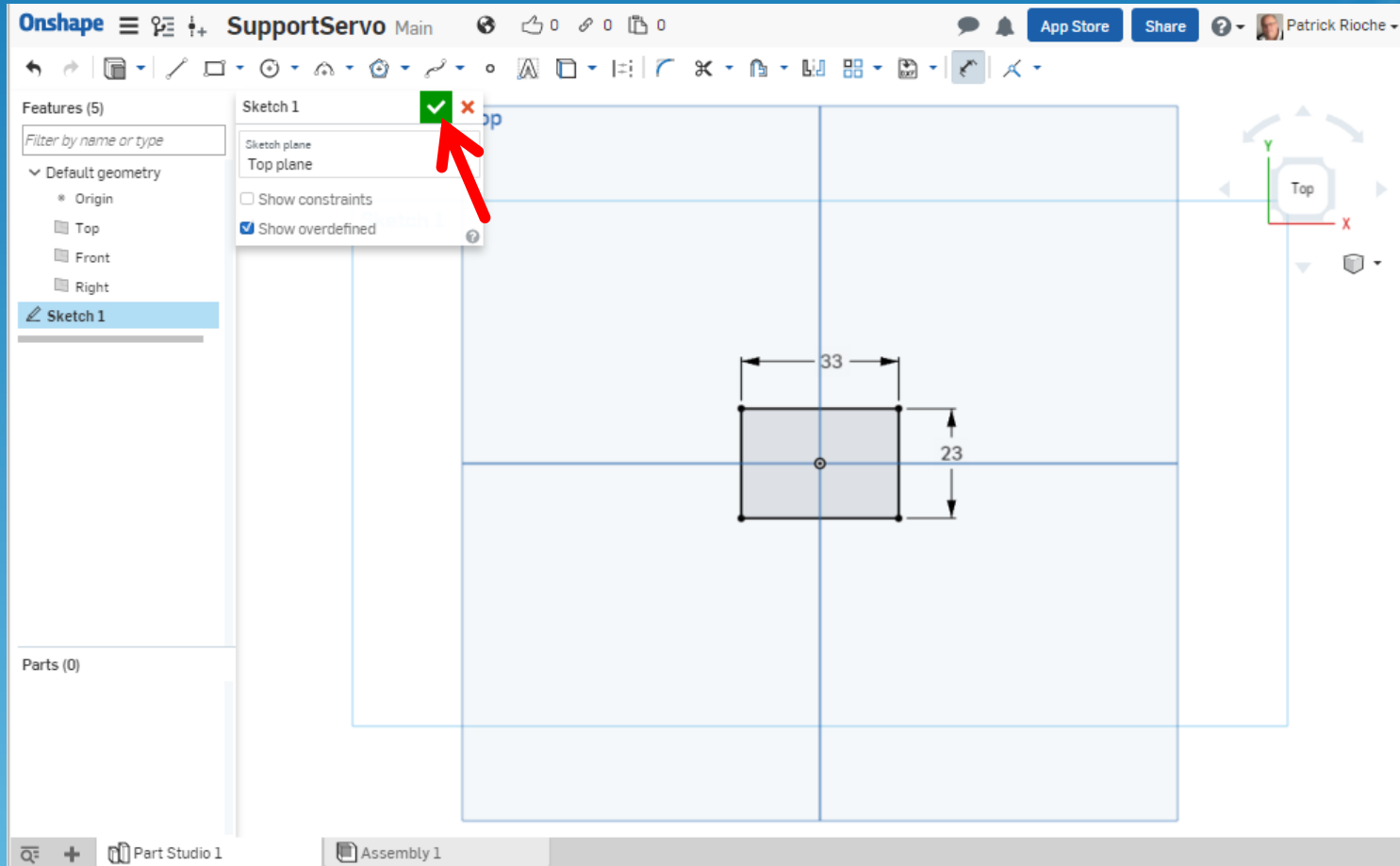
Créer un rectangle centré



Déterminer la longueur et la largeur



Valider le rectangle à la bonne taille



Créer une extrusion de 2mm et vérifier l'extrusion en 3D



Onshape SupportServo Main

App Store Share Patrick Rioche

Features (6)

Filter by name or type

Default geometry

- Origin
- Top
- Front
- Right

Sketch 1

Extrude 1

Parts (1)

Part 1

Extrude 1

Solid Surface

New Add Remove Intersect

Faces and sketch regions to extrude

Sketch 1

Blind

Depth 2 mm

Draft

Second end position

Isometric

Dimetric

Trimetric

Named views

Zoom to fit

Zoom to window

Turn perspective on

Shaded

Shaded without edges

Shaded with hidden edges

Hidden edges removed

Hidden edges visible

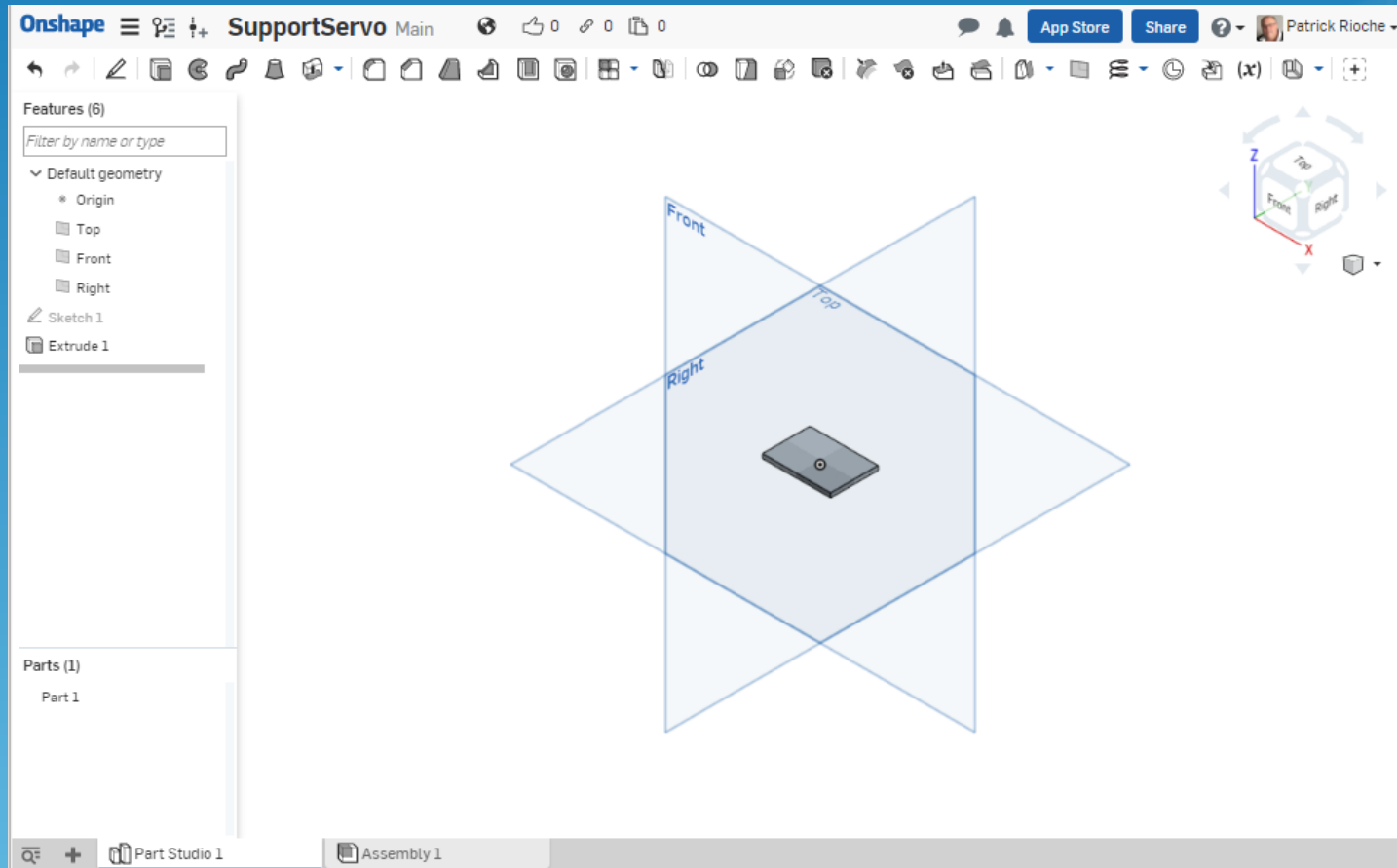
Translucent

Curvature visualization

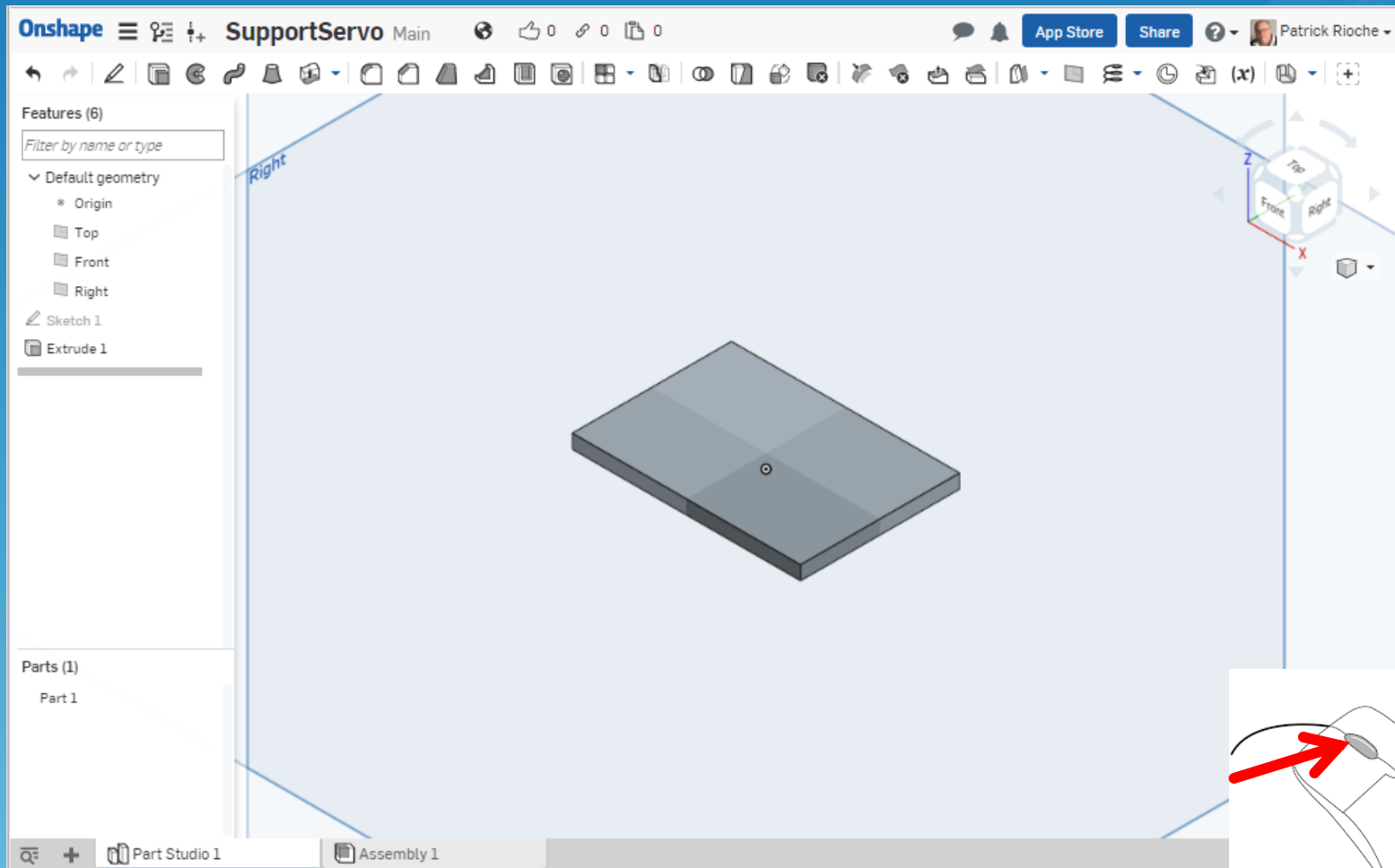
Turn section view on

Part Studio 1 Assembly 1

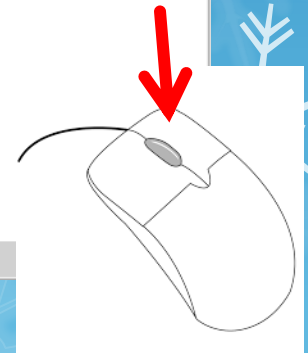
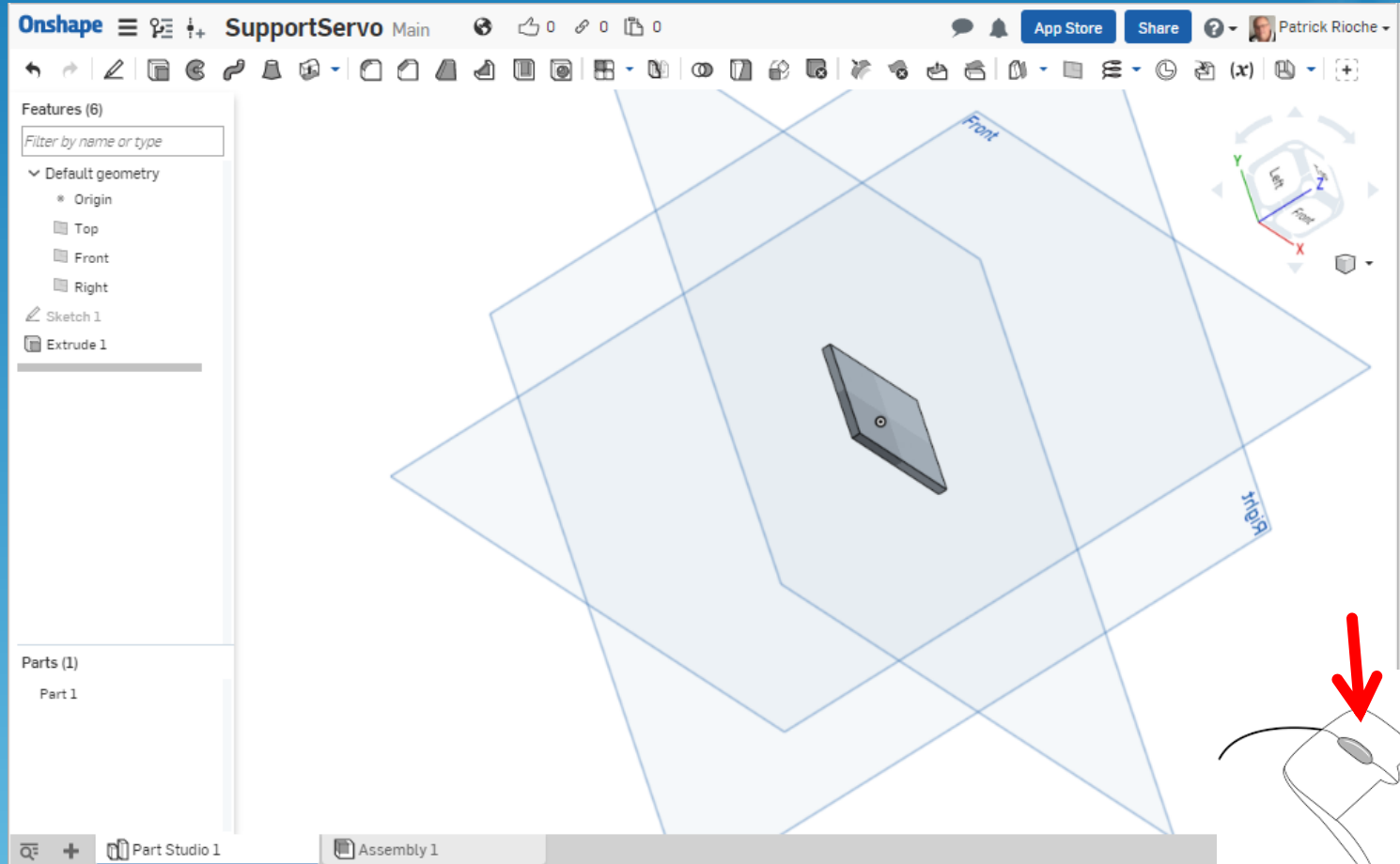
Rectangle extrudé de 33 sur 23 mm en 3D



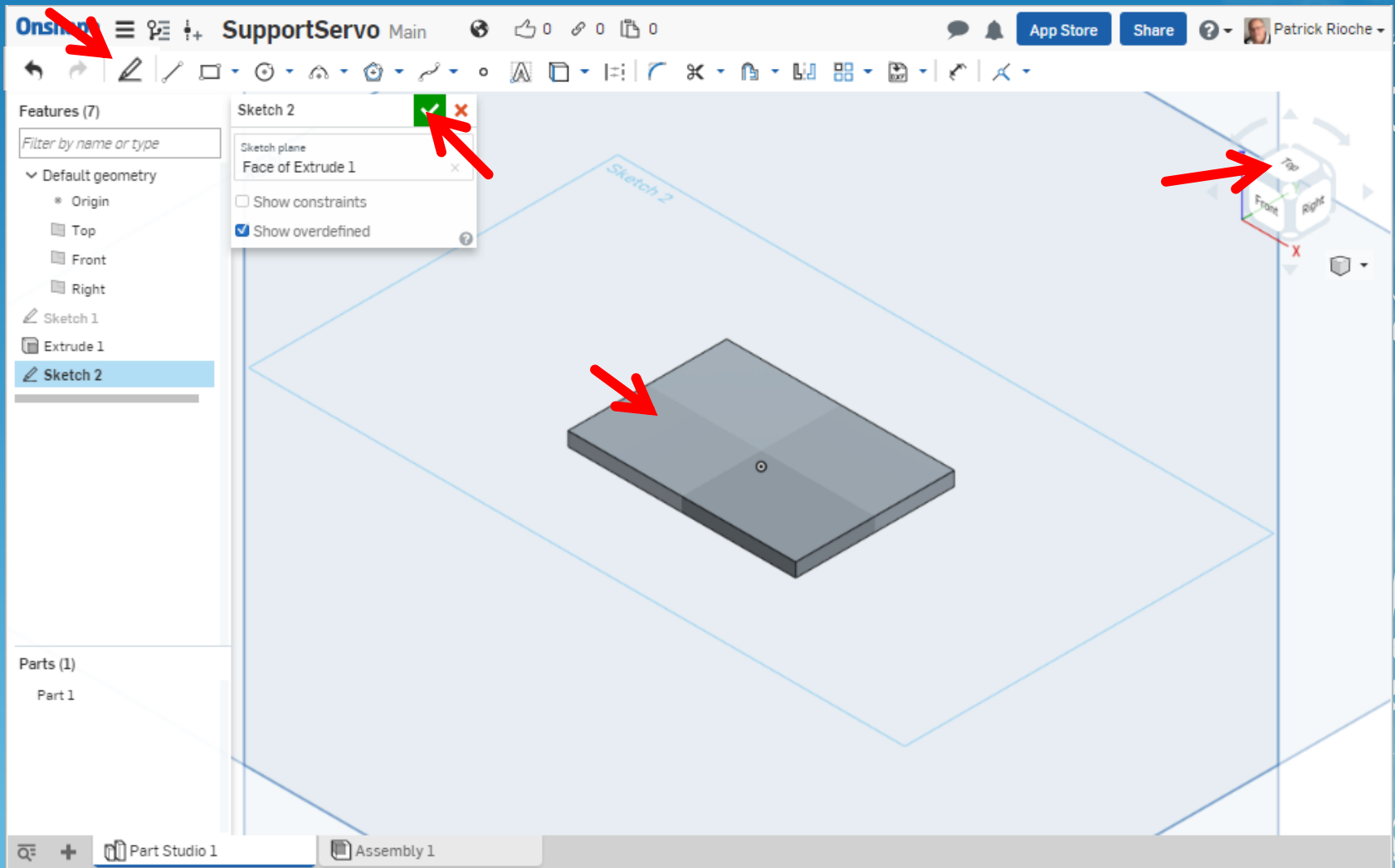
Grossir avec la molette de la souris



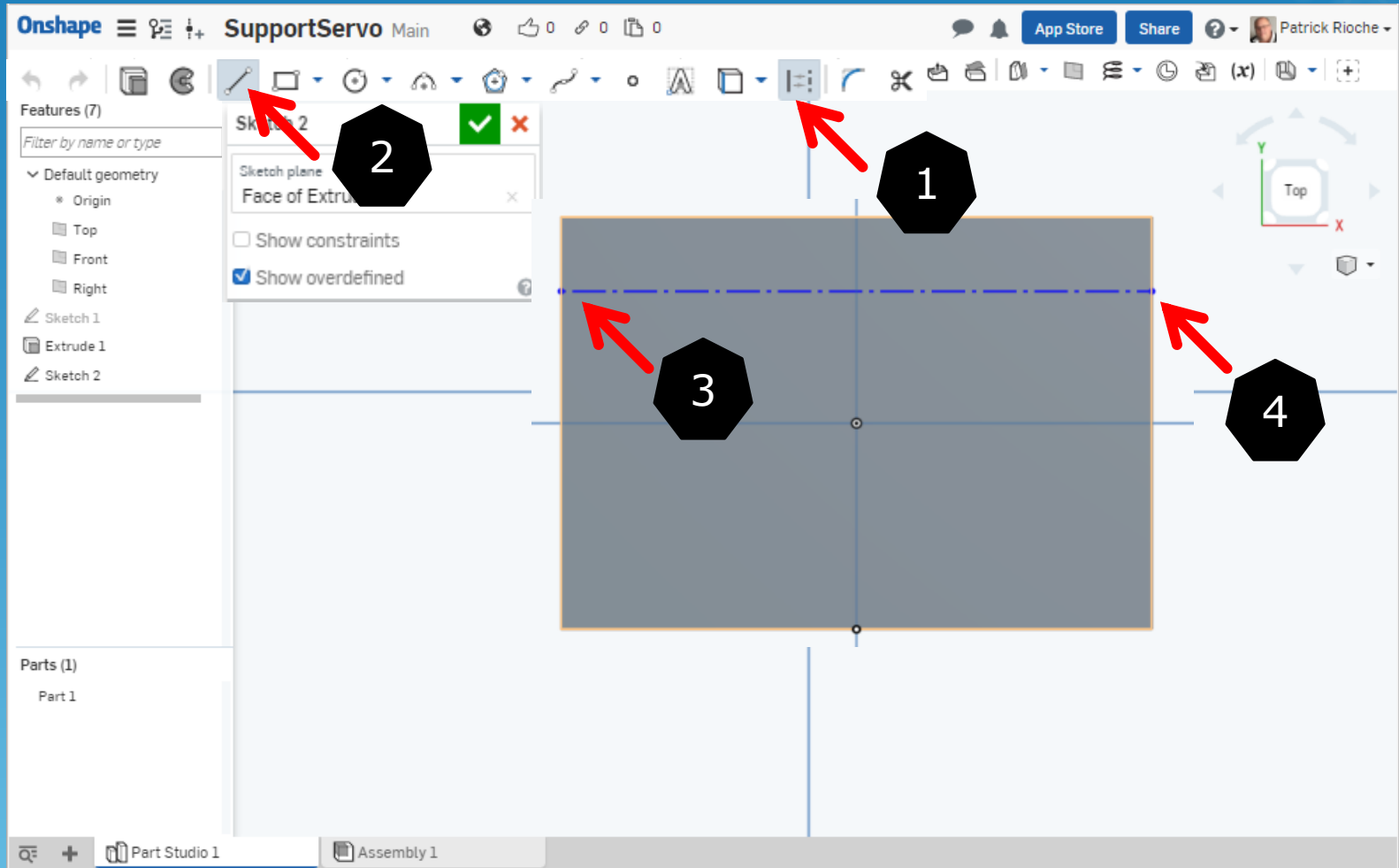
Turner l'objet



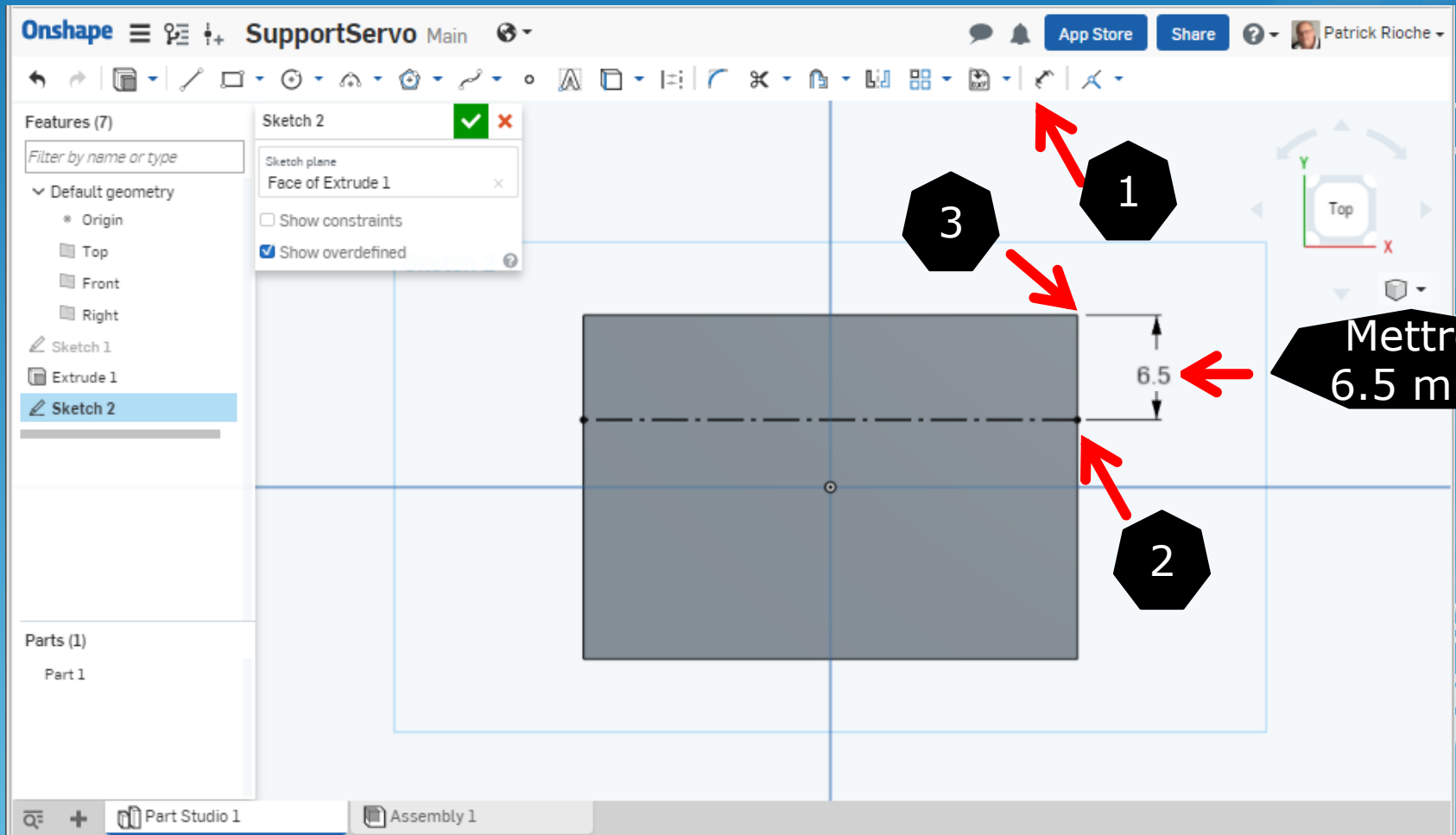
Créer un sketch sur la face extrudé



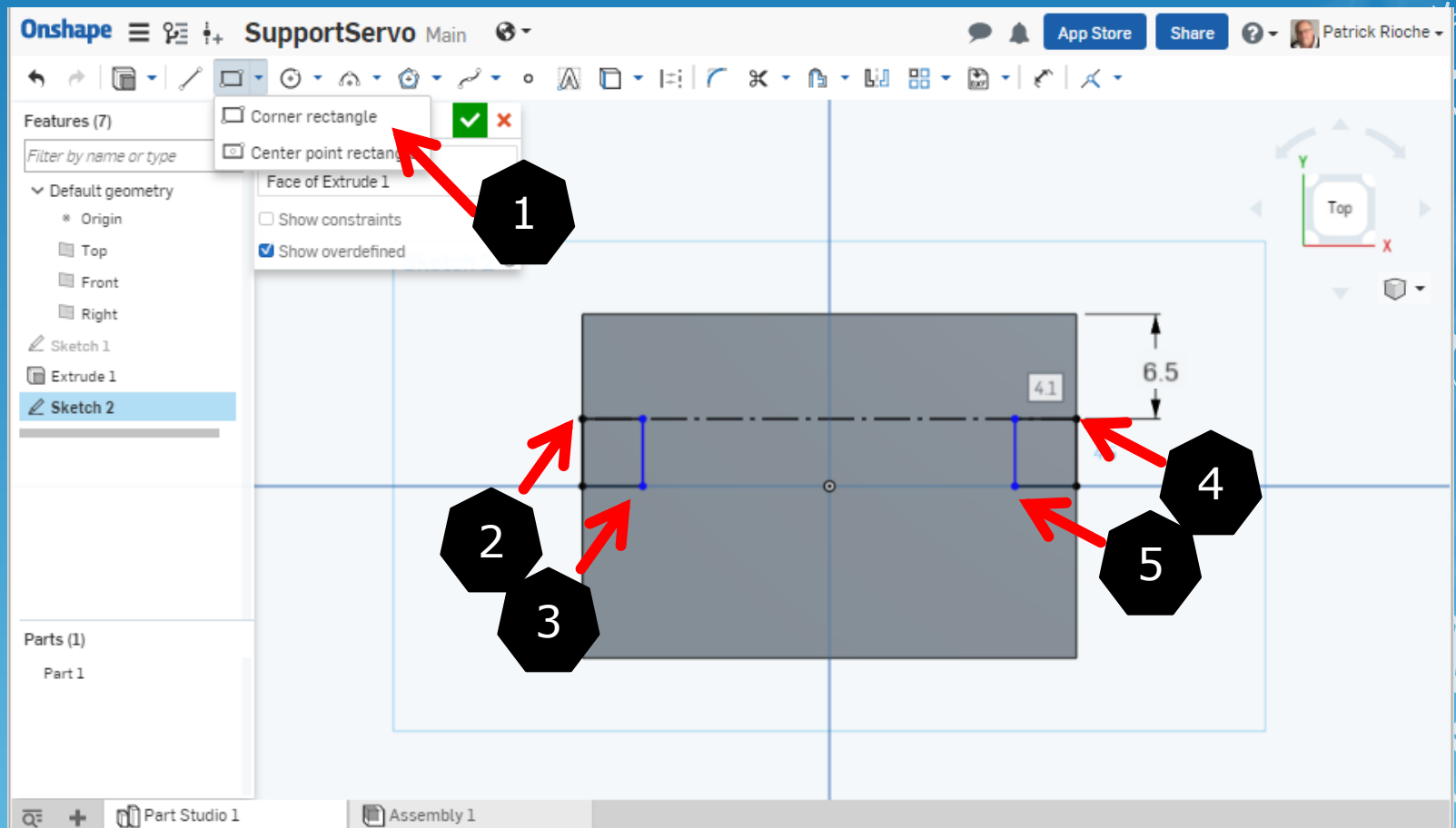
Ajout une ligne d'accroche



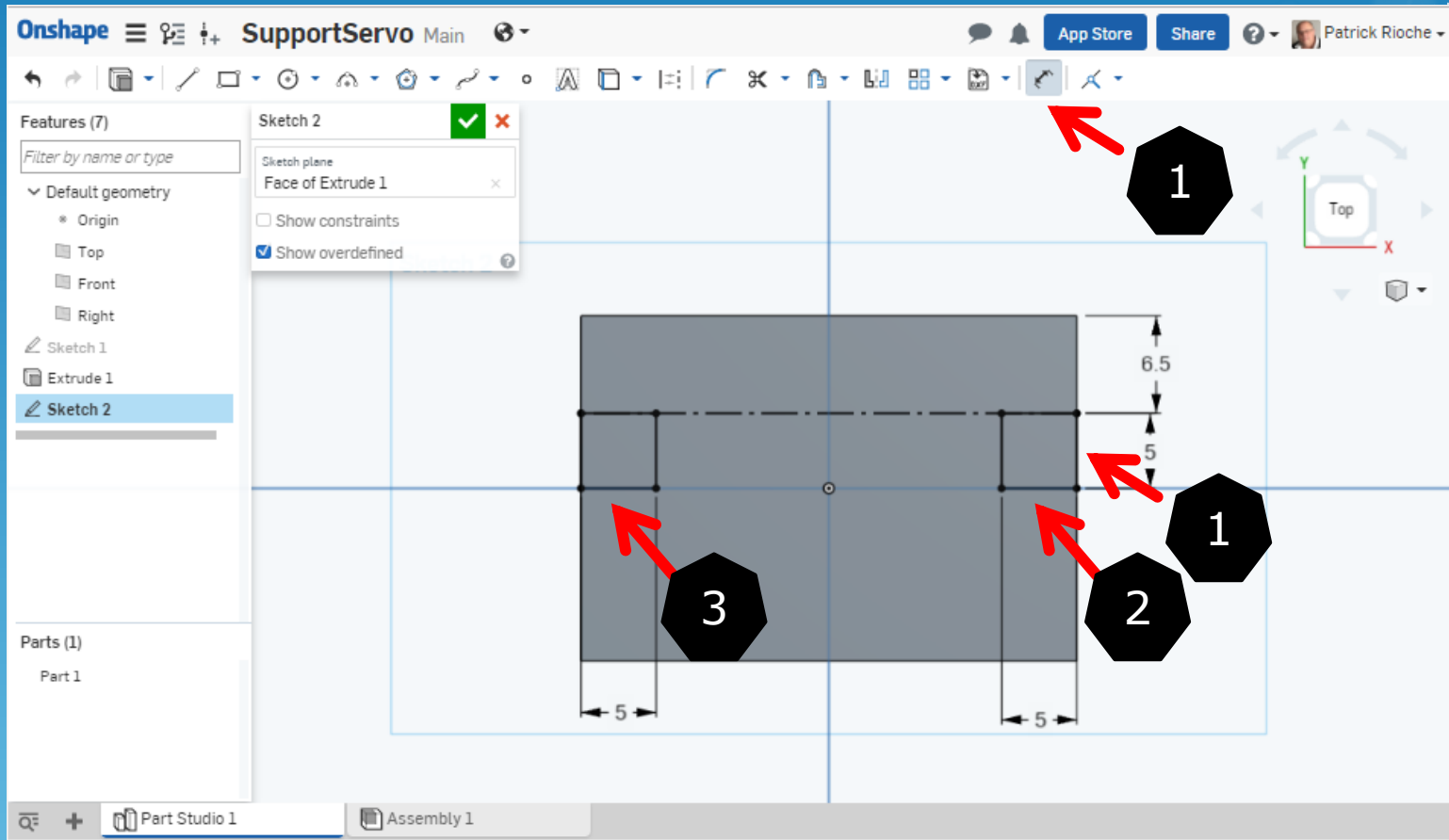
Mesurer un écart de 6.5 mm



Ajouter 2 rectangle par les coins



Ajuster les carrés à 5X5

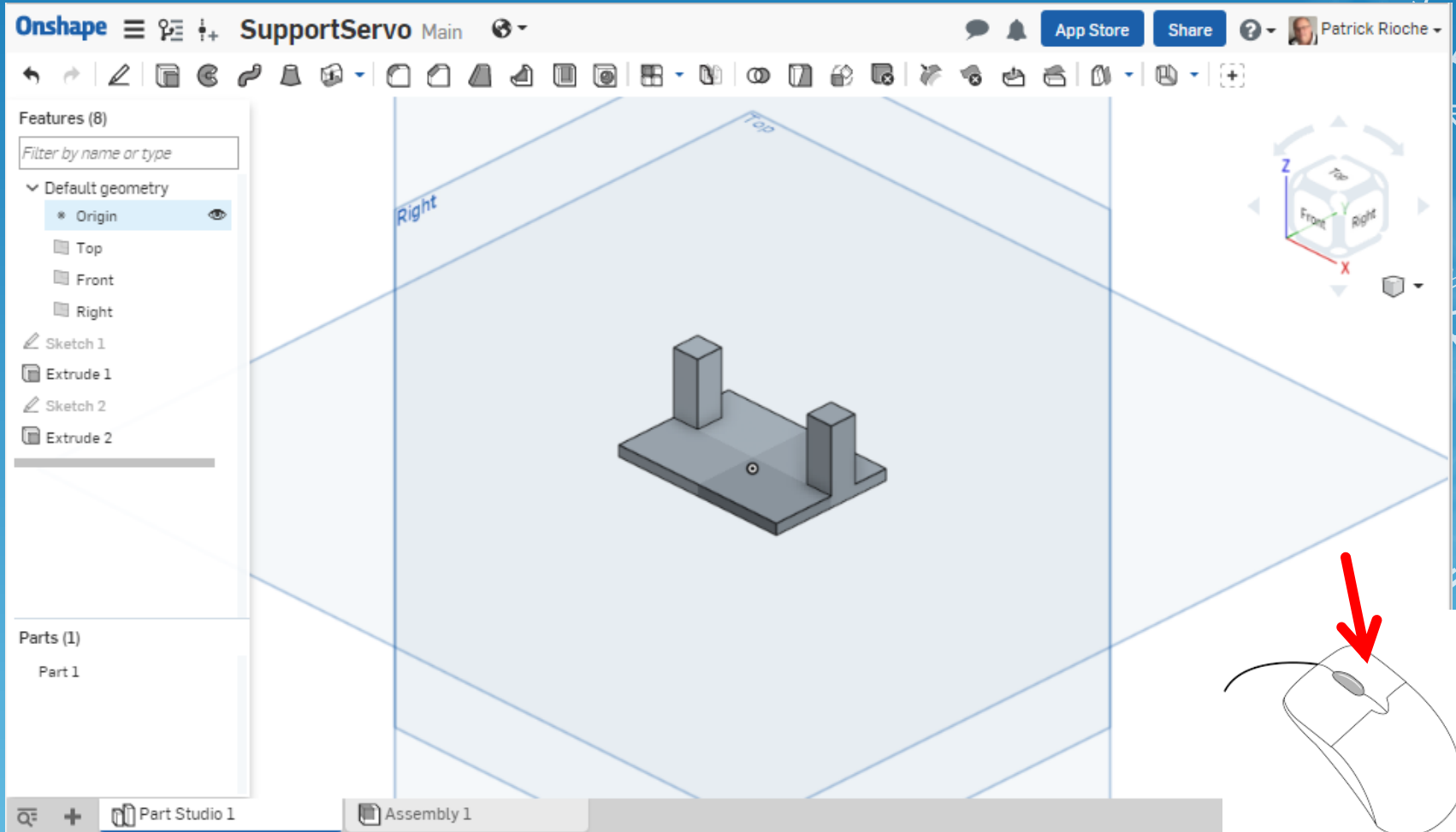


Sélectionner les 2 carrés pour extruder

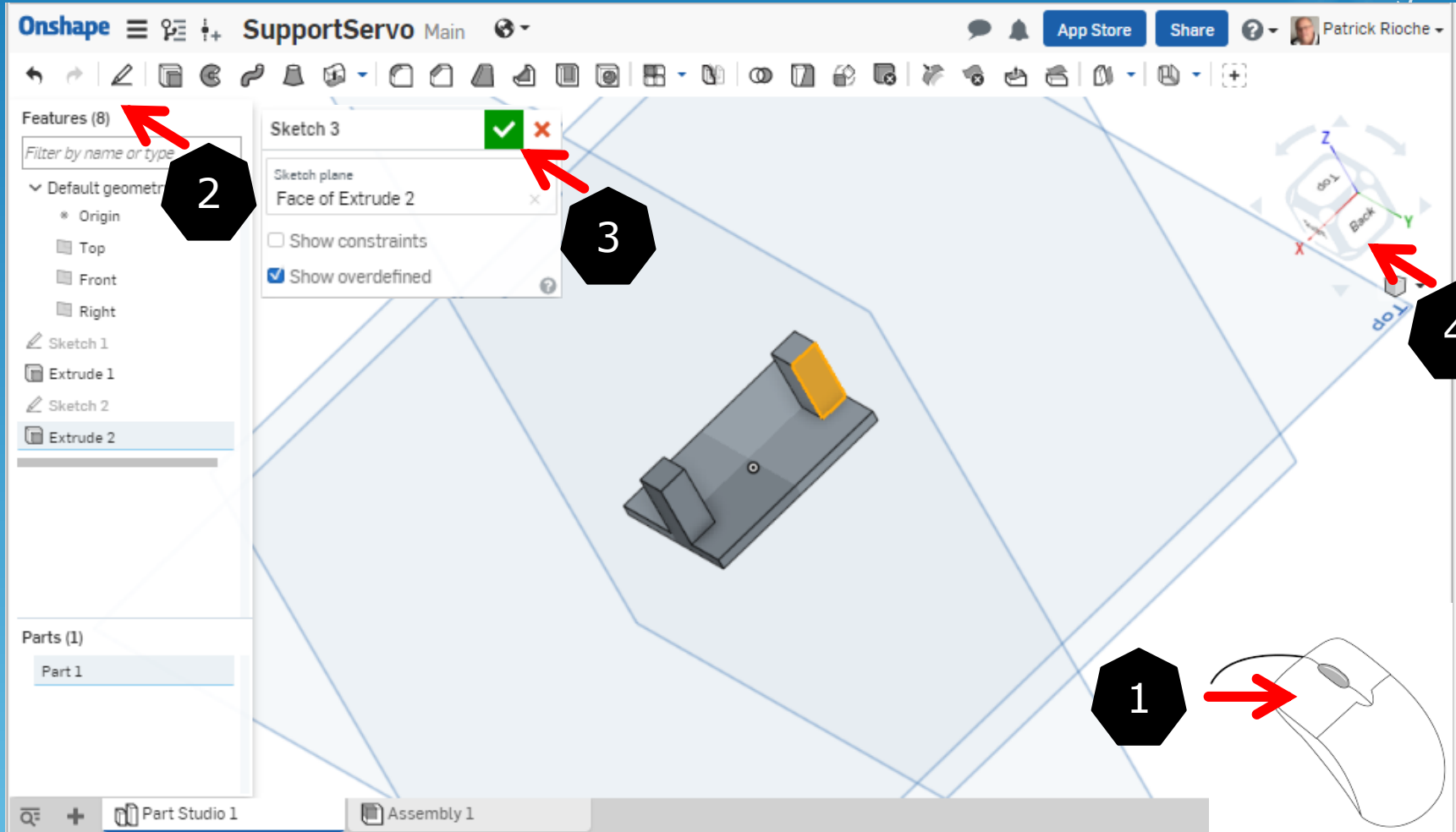


The screenshot shows the Onshape software interface. The 'Extrude 2' dialog box is open, showing the 'Solid' tab. The 'Faces and sketch regions to extrude' list contains two entries: 'Face of Sketch 2'. The 'Depth' is set to '12 mm'. A red arrow points to the '12 mm' value, with a callout box containing the text 'Mettre 12 mm'. Another red arrow points to the 'Add' button in the dialog box. A third red arrow points to the 'Sketch 2' feature in the 'Features (7)' list. A fourth red arrow points to the 'Top' view in the 'View' panel. A fifth red arrow points to the 'Isometric' view in the 'View' panel. The 3D model shows a grey rectangular block with two yellow squares highlighted on its top surface. Red arrows point from callouts 1 and 2 to these squares. The bottom status bar shows 'Parallel Dist: 0.00 mm'.

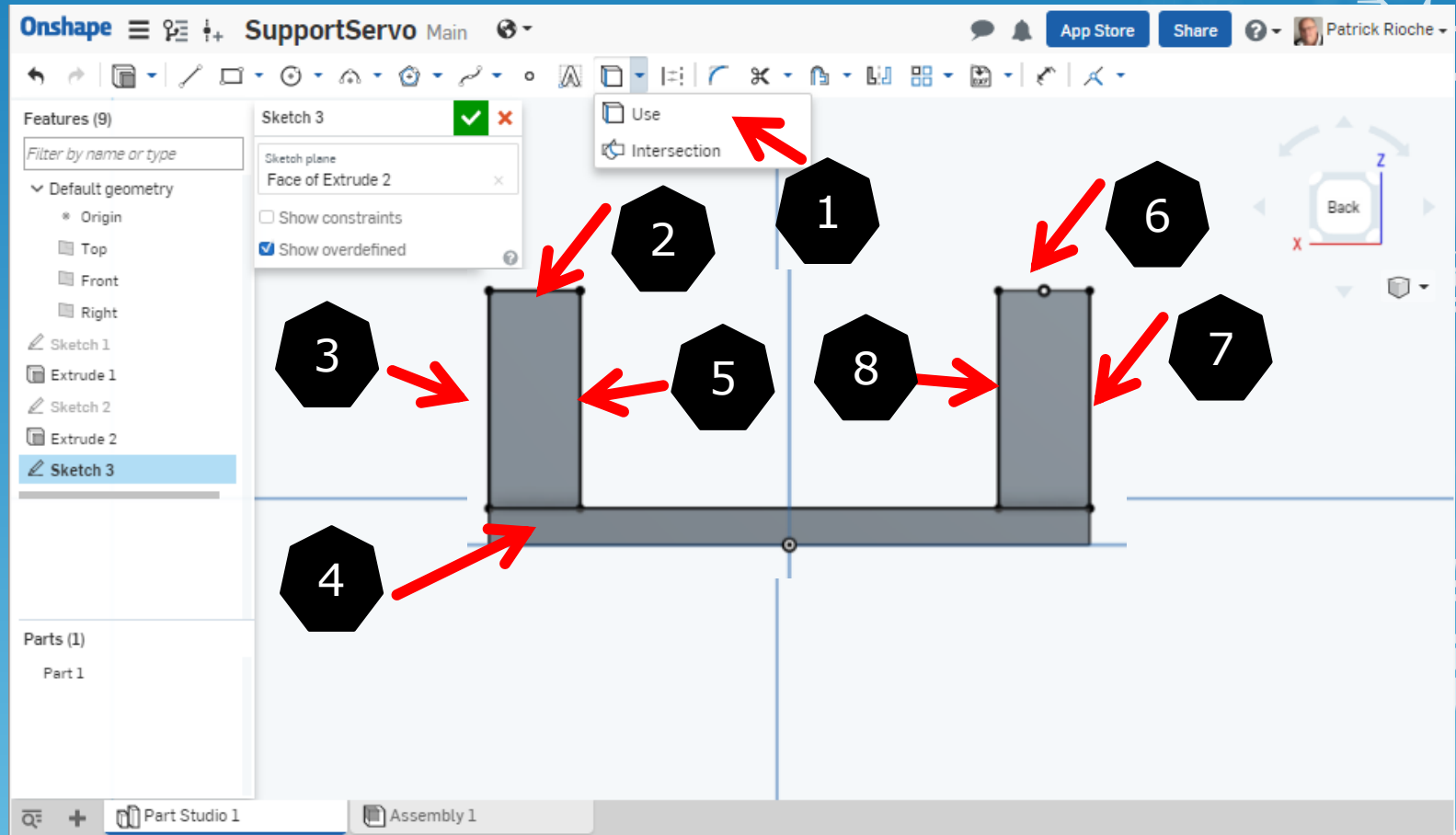
Se positionner pour ajouter les trous pour les vis



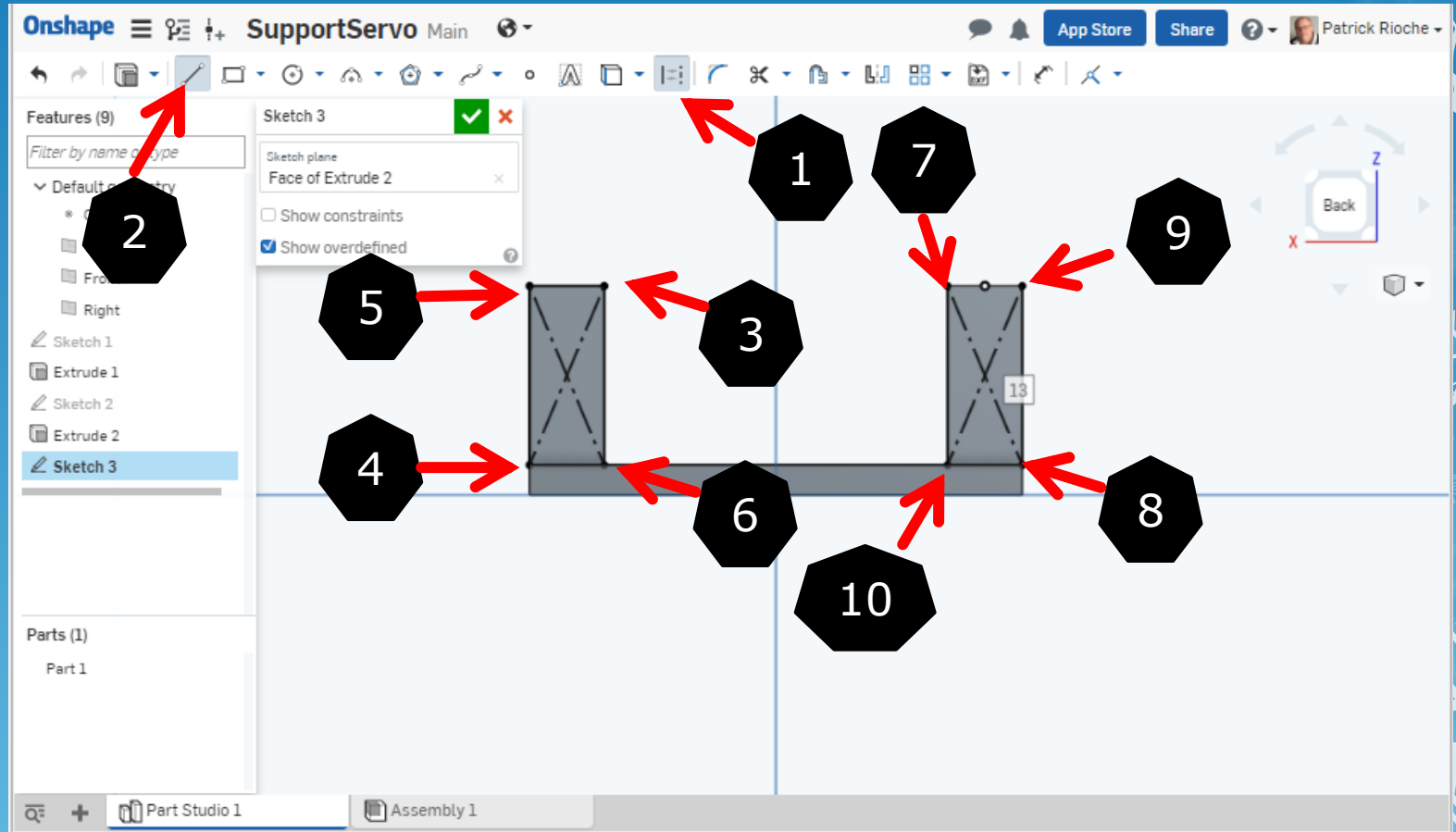
Ajouter un sketch sur la face sélectionner



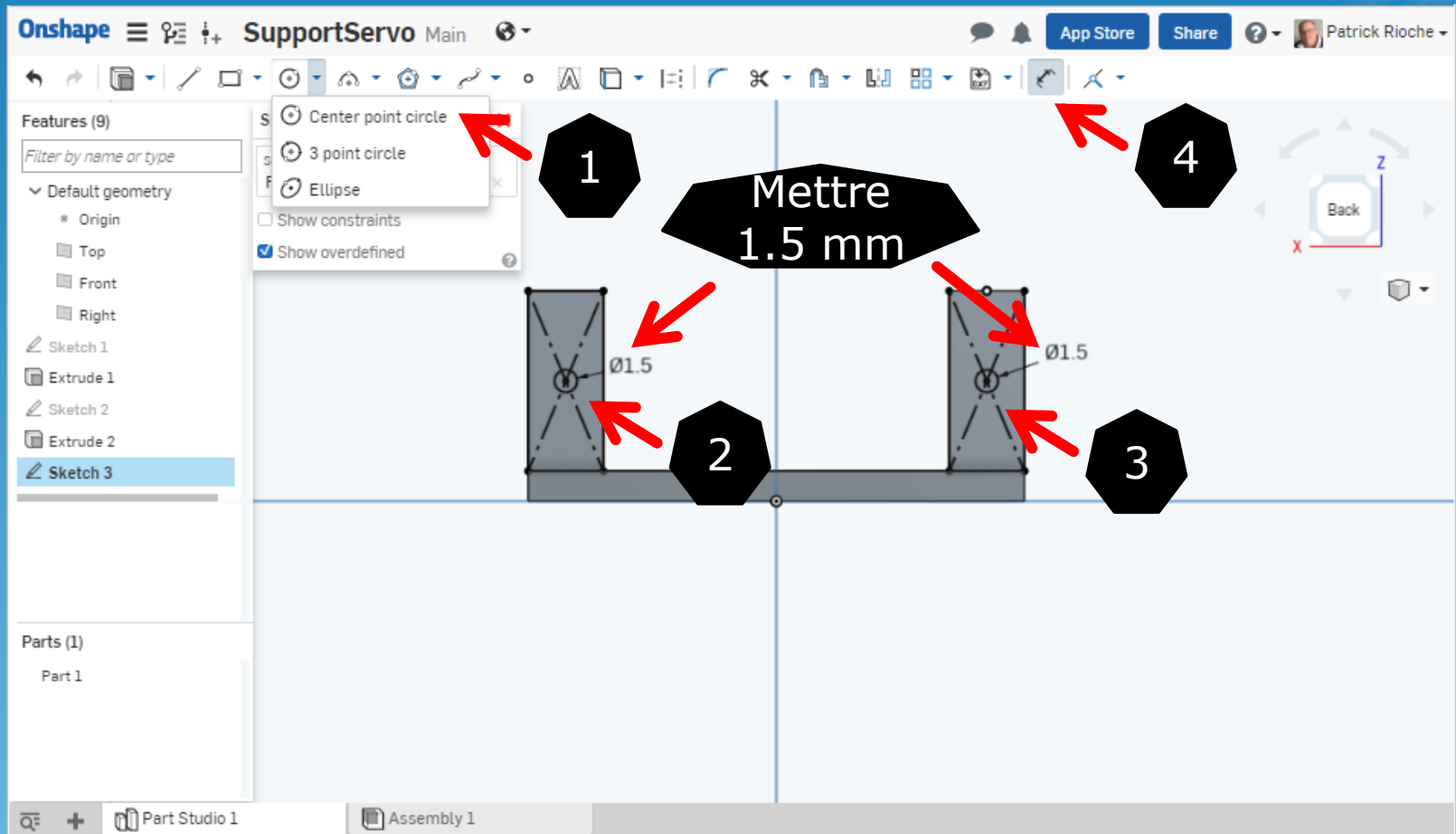
Décalquer les arrêts



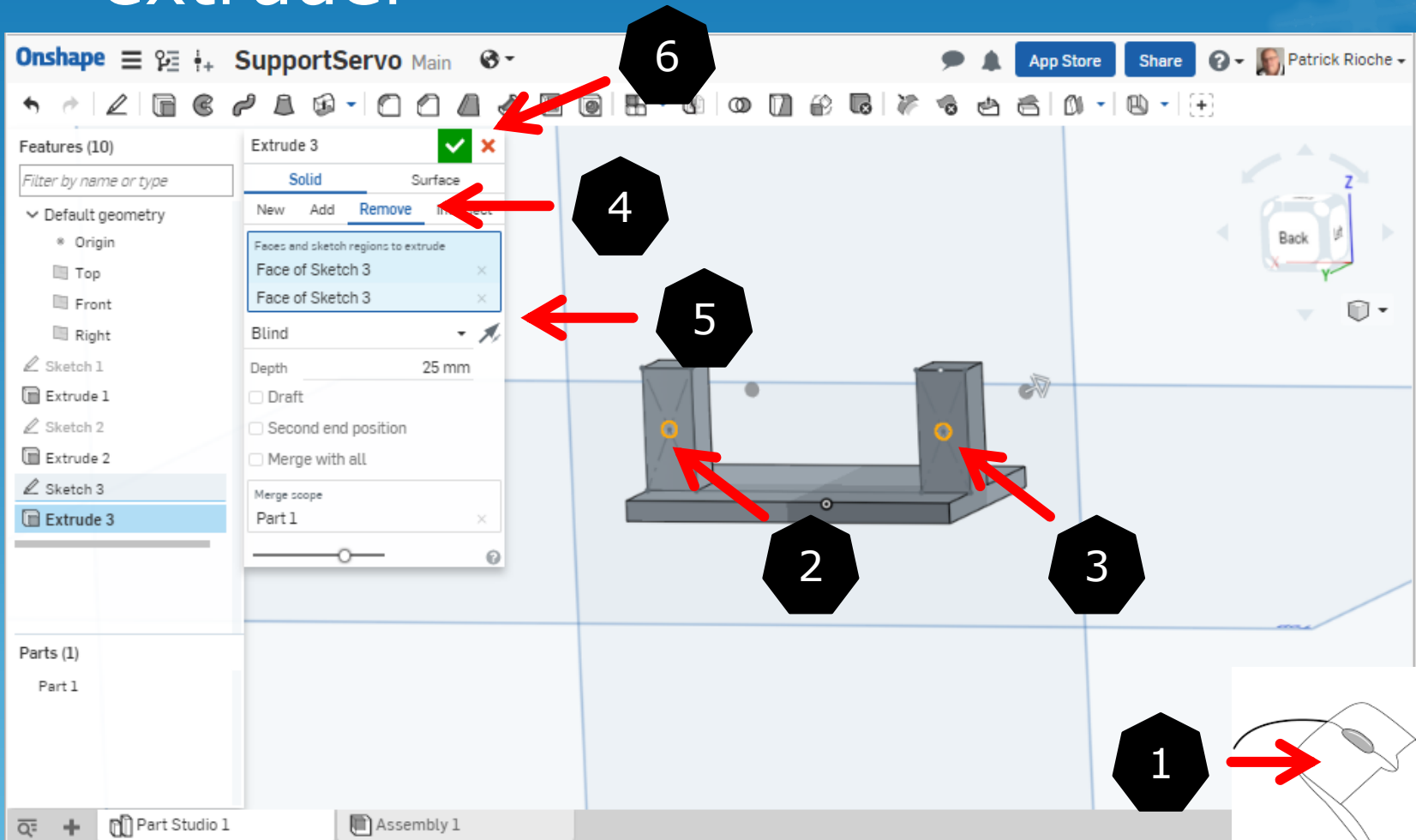
Créer 4 diagonales de tracage



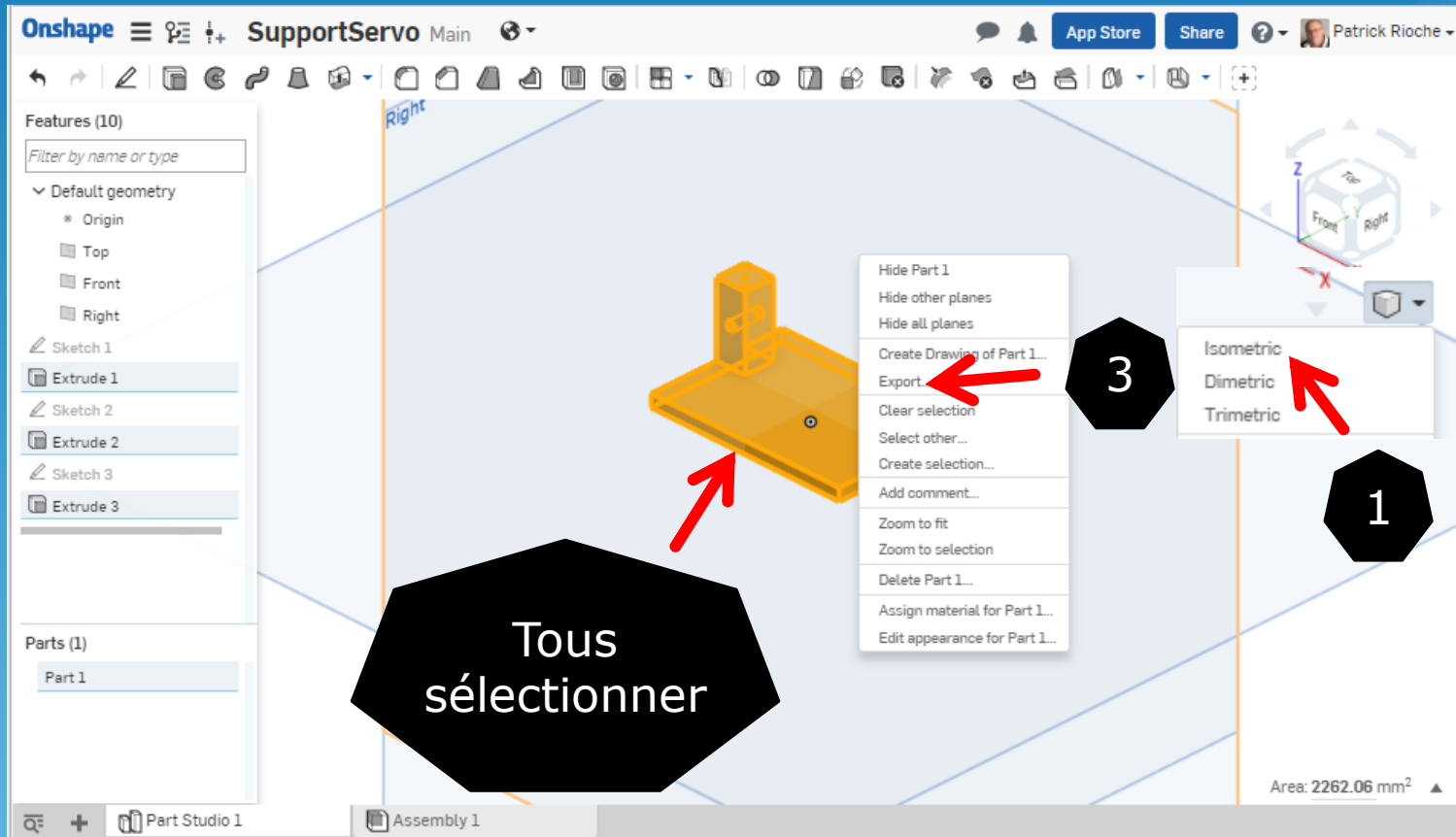
Ajouter 2 cercles de 1,5 mm centrés sur les diagonales



Sélectionner les 2 cercles pour extruder



Préparer l'export en .stl



Nommer le fichier .stl

The image shows the Onshape software interface with the 'Export' dialog box open. The dialog box contains the following fields:

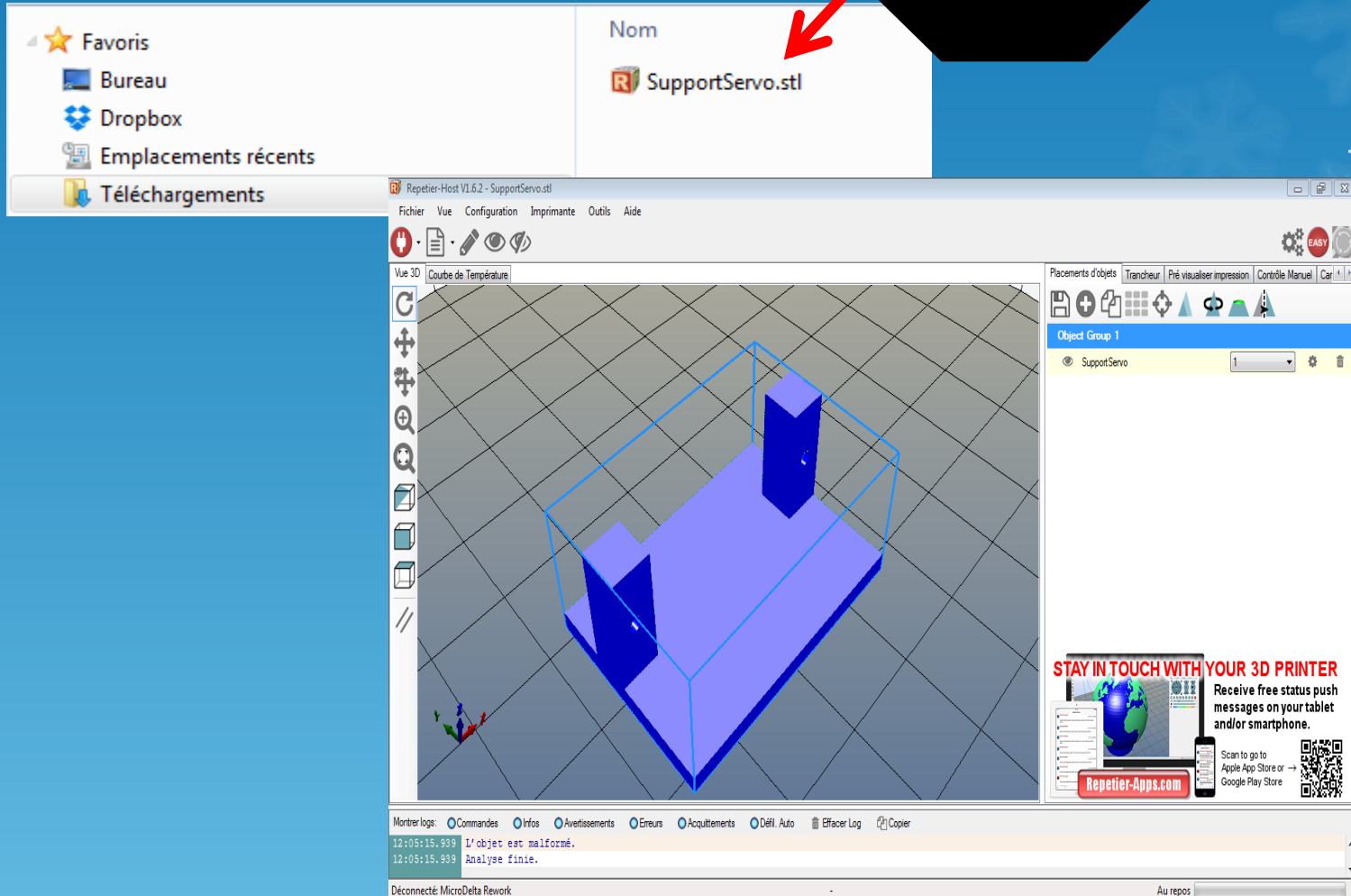
- File name:** SupportServo (indicated by a red arrow and a black octagon with the number 1)
- Format:** STL
- STL Format:** Text
- Units:** Millimeter
- Resolution:** Fine
- Options:** Download (indicated by a red arrow and a black octagon with the number 2)

At the bottom of the dialog box are 'OK' and 'Cancel' buttons. Below the dialog box, a file explorer window is open, showing the 'Téléchargements' folder. The file 'SupportServo.stl' is listed under the 'Nom' column.



Cliquer le .stl

Fichier .stl



Trancher avec CuraEngine

Tr

a
n
c
er

Repetier-Host V1.6.2 - SupportServo.stl

Fichier Vue Configuration Imprimante Outils Aide

Vue 3D Courbe de Température

Placements d'objets Trancheur Pré visualiser impression Manuel Car...

Trancher avec CuraEngine Arrêter le Trancheur

Trancheur: CuraEngine Manager Configuration

Réglages impression :

Configuration impression: Mode normal

Adhesion Type: Aucun

Qualité: 0.2 mm

Support Type: Aucun

Vitesse: Lente Rapide

Vitesse d'impression: 50 mm/s

Vitesse Périmètre extérieur: 45 mm/s

Vitesse Remplissage: 80 mm/s

Densité Remplissage: 30%

Activer le Refroidissement

Réglages filament :

Extrudeur 1: ABS PREMIUM

CuraEngine is separate, external program developed by David Braam. For more information visit <https://www.ultimaker.com>

Montrer logs: Commandes Infos Avertissements Erreurs Acquittements Défil. Auto Effacer Log Copier

12:05:15.939 L'objet est malformé.

12:05:15.939 Analyse finie.

Déconnecté: MicroDelta Rework Au repos

Finesse

Remplissage

Fil ABS

Sauvegarde le .gco sur la carte SD

The image shows a screenshot of the Repetier-Host V1.6.2 interface. The main window has a menu bar with 'Fichier', 'Vue', 'Configuration', 'Imprimante', 'Outils', and 'Aide'. Below the menu is a toolbar with icons for home, file, edit, view, and zoom. The main area displays a 3D model of a blue cube. On the right, there are buttons for 'Imprimer', 'Sauvegarder', 'Editer G-Code', and 'Sauvegarder sur Carte SD'. Below these is a 'Statistiques Imprimante' section with the following data:

Statistiques Imprimante	
Temps d'impression:	15m:34s
Nombre de couches:	70
Nbre total de lignes:	5570
Filament nécessaire:	786 mm

A dialog box titled 'Sauver G-Code pour impression directe' is open, showing options to include start/stop codes and work order commands. It has 'Sauvegarde' and 'Annuler' buttons. A file save dialog is also open, showing the path 'SD > Ordinateur > SDHC (F:)' and the filename 'SupportServo'. The dialog has 'Enregistrer' and 'Annuler' buttons. Red arrows point from black callout boxes to these elements.

Sur SD (points to 'Sauvegarder sur Carte SD')

longueur (points to '786 mm')

Sauvegarde (points to 'Sauvegarde' button)

fichier.gco (points to the filename field)

OK (points to 'Enregistrer' button)

Log window at the bottom left shows:

```
Montrer logs: [x] Commandes [x] Infos [x] Avertissements [x] Erreurs [x]
12:10:41.670 <CuraEngine> Filament: 785
12:10:41.670 <CuraEngine> Filament2: 0
```

Bottom status bar: Déconnecté: MicroDelta Rework



uDelta Rework



- Tourner pour sélectionner
- Appuyer pour valider

Bouton de
sélection et de
validation



MicroDelta
Rework
Bienvenue

motion b18
TECH U1.7d

T:023/000 B:023/000
X 0 Y 0 Z 0.00
100% 00:00:00 0%
MicroDelta REWORK

> ..Retour
Imprimer..
Deplacer
Preparer
Sonde
Calibrer
Configurer
Menu personnalise

> ..Retour
Retour origine
STOP Moteurs
Prechauffage
Coupe chauffage
Extruder
Temperature
Ventilation



..Retour
Imprimer..
> Preparer
Sonde
Calibrer
Configurer
Menu personnalise

..Retour
Retour origine
STOP Moteurs
> Prechauffage
Coupe chauffage
Extruder
Temperature
Ventilation

```
> ..Retour
Retour origine
STOP Moteurs
Prechauffage
Coupe chauffage
Extruder
Temperature
Ventilation
```

```
> ..Retour
Imprimer..
Deplacer
Preparer
Sonde
Calibrer
Configurer
Menu personnalise
```

```
T:050/240 B:030/090
X 0 Y 0 Z 0.00
100% 00:00:00 0%
MicroDelta REWORK
```



Température
Tête ABS : 240°

Température
Lit ABS : 90°

T:240/240 B:090/090
X 0 Y 0 Z 0.00
100% 00:00:00 0%
MicroDelta REWORK



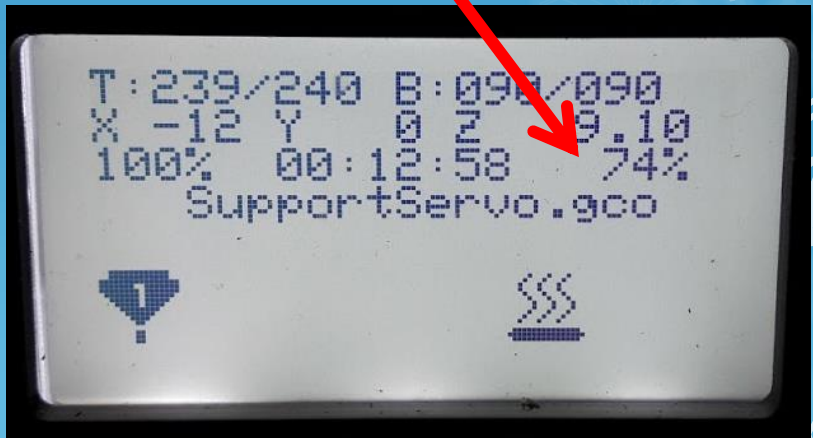
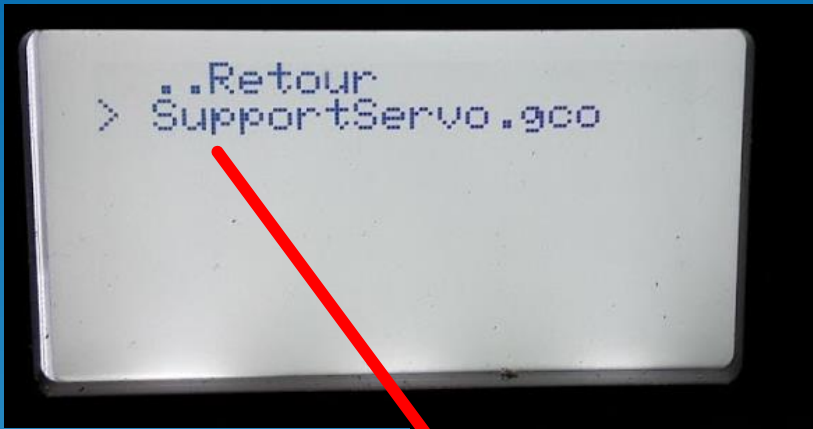
> ..Retour
Imprimer..
Déplacer
Préparer
Sonde
Calibrer
Configurer
Menu personnalisé

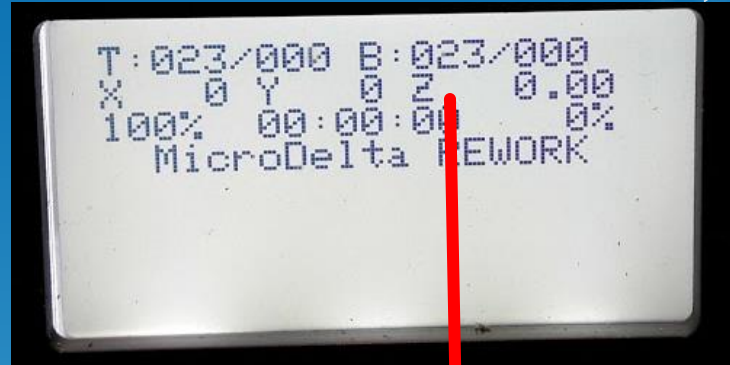
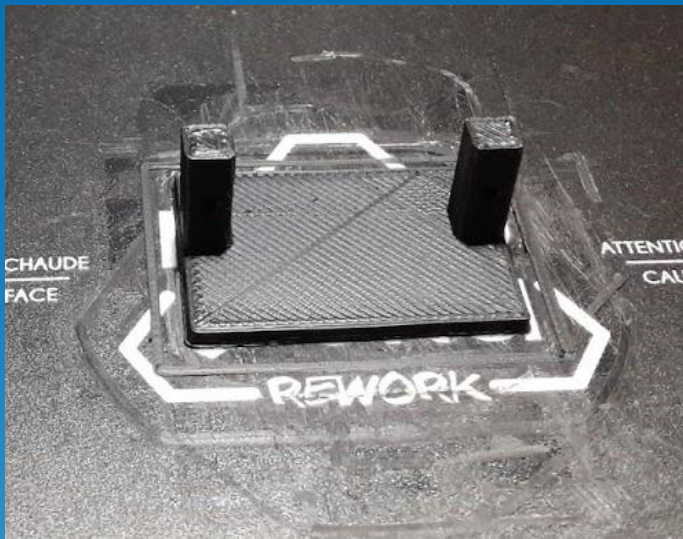
> ..Retour
Imprimer..
Déplacer
Préparer
Sonde
Calibrer
Configurer
Menu personnalisé

> ..Retour
sd ext/
sd/

> ..Retour
sd ext/
sd/

> ..Retour
SupportServo.gco





Support Servo 9g terminé

