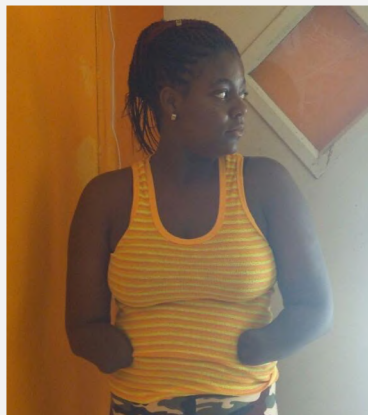


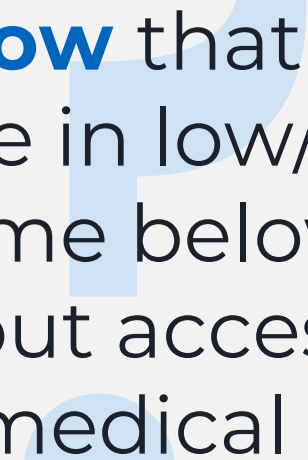


# nHands


Enabling Accessible  
Prosthetic Hands







**Did you know** that **80%** of disabled persons live in low/middle income countries, some below the poverty line and without access to adequate medical care?





**40M**  
persons  
worldwide\*

---

**are in need of a  
prosthetic/orthotic**

**80 %**  
of **persons** with  
**disabilities\*\***

---

**live in low/middle  
income countries**



80% ~ 32 million persons



---

Social Exclusion



---

Economic  
Exclusion



---

Difficult Living  
Conditions

“

**PATIENTS STRUGGLE TO REACH CLINICS,  
SOLUTIONS STRUGGLE TO REACH PATIENTS.**



**Dr. Viqar Qurashi**

Orthopaedic surgeon at NHS Trust,  
Founder of Naya Quadam Foundation.

”

# Challenge

**Despite** efforts of government and aid organizations – technological and infrastructure problems remain.

**Prosthetic Hands** lack robustness, affordability, local manufacturing, and customization.



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Otto Bock  
>50.000 €



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Jaipur Hand  
< 300 €

# EnHands Prosthetics



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Cosmetic  
<10 € \*



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Functional  
< 50 €\*

**Tailored** for low income regions

**Adaptable** to gender and age

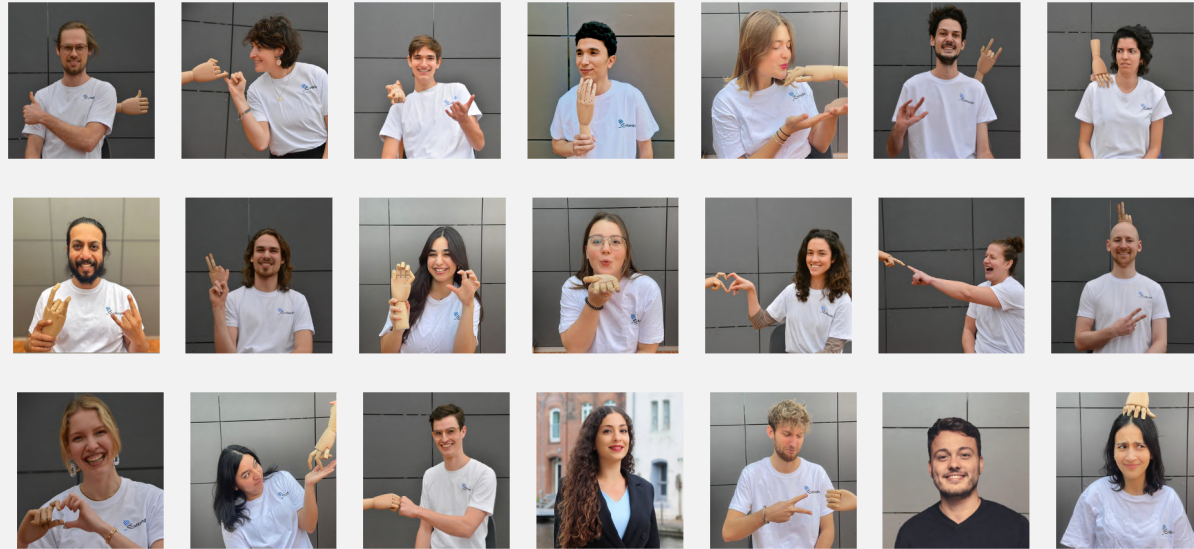
**User** Feedback through local partners

**Sustainable** design with local manufacturing



# Who are we?

**EnHands E.V.** A Non-profit Initiative consisting of ~20 students, graduates and researchers from engineering biomechanics, and economics situated at Technical University of Munich.



# Our Mission

develop **accessible**, cost-effective, robust, and functional **prostheses** for people in economically disadvantaged regions, utilizing sustainable, locally available materials and manufacturing methods.

> **We develop innovative solutions for the 80%**



Accessible



User centered



Local manufacturing

Founding



Field Study Nepal & Bangladesh



Functional prototype V1



Cosmetic prototype V3



2022

2023

2024

2025

Cosmetic prototype V1



Glove development



EnHands e.V.

# Cosmetic Prototype

Our **3D printed** Prototypes were modeled after a 3D scan of a child's hand.

**20 prosthesis** were given to amputees free of charge.

Our **local collaborators Naya Qadam** helped us distribute them in Nepal and Bangladesh to assess the **user acceptance**.





# Cosmetic Prototype

Based on this **user feedback** we developed the next iteration.

The new design utilizes a **skin-like** structure using silicone, with a PU foam core capable of **local manufacturing**.

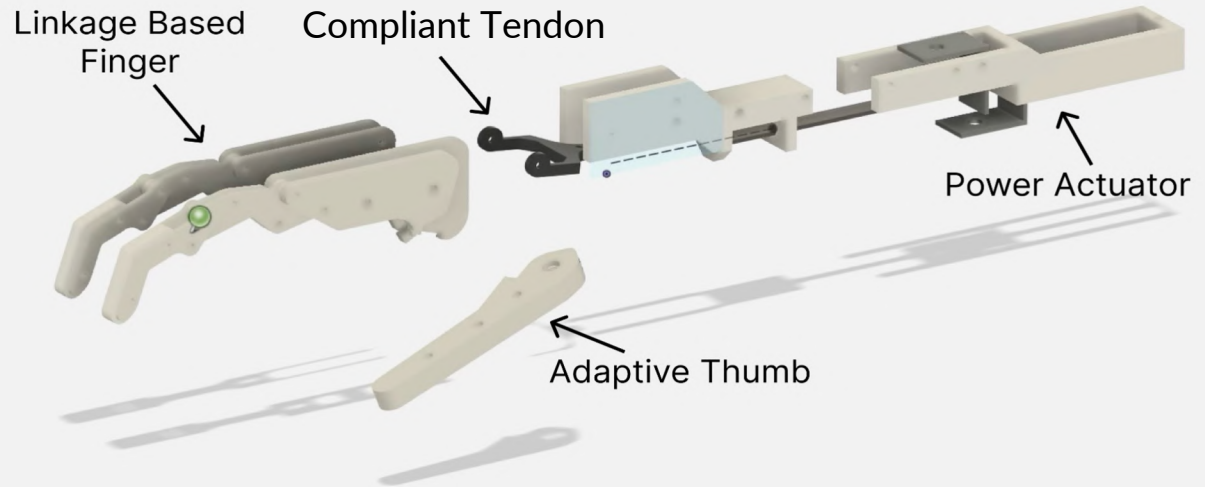




# Functional Prototype

The mechanism uses a **simple but smart** design with a compliant tendon and an adaptive thumb.

Let's get functional!



# Functional Prototype

This enables three **different grasping types** and **local manufacturing** with sheet metal, while the outside gets a skin-like appearance via a **silicone glove**.



# What's Next?

## Prototyping

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Constant advancements of the functional and cosmetic prototype.

## Manufacturing

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Of 50 functional prototypes for Pakistan Camp 2025.

## Field Studies

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To enable a User-centered design.

## Lab Tests

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To evaluate the robustness of materials and mechanisms.

## Collaborations

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Increase our network of local Partners.

THAT'S WHERE WE NEED YOUR HELP!

# Give a hand, make an impact!



Engr. Md. Nazmul Hasan  
February 11, 2024 1:07 PM

# How to help?

## DONATE – SPONSOR – BECOME AN ENHANDER

You can help fund our prototyping by donating to our bank account — **any amount is appreciated.**

**EnHands e.V.**

**IBAN:** DE74 8306 5408 0005 4605 90

**BIC:** GENODEF1SLR



[Donate via PayPal](#)

We are also happy to issue a donation receipt for your taxes.



# Become a Sponsor



## **PINKY PROMISE Sponsor**

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donation 50 € (1 hand)

### benefits

- Regular development updates on our projects and initiatives



## **HANDSHAKE Sponsor**

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donation 1000 € or more

### benefits

- Regular development updates on our projects and initiatives
- Promotion on our website



## **EMBRACE Sponsor**

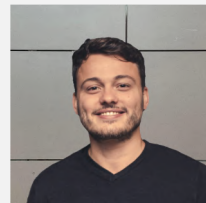
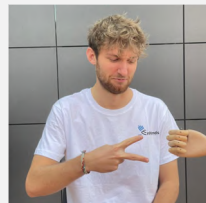
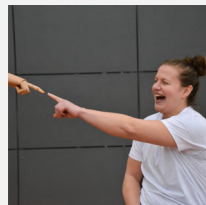
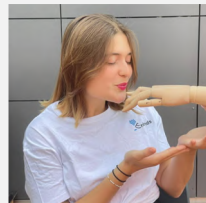
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donation 2500 € or more

### benefits

- Regular development updates on our projects and initiatives
- Prominent promotion on our website
- Social media presence
- Dedicated blog post
- Sponsor logo prominently featured at all EnHands events

# Thank You!





[www.enhands.de](http://www.enhands.de)



[enhands](https://www.instagram.com/enhands)



[info@enhands.de](mailto:info@enhands.de)