

#### **NeuroMaker Hand**

# Build, Code, Create & Discover with Real-World Technology.

Now you can open a world of STEM opportunities in the classroom or remote learning settings. The NeuroMaker Hand activity set introduces students from middle and high school to advanced concepts in bio and neurosciences, programming and artificial intelligence, mechanical and electrical engineering, 3D printing and more.

Our curriculum delivers more than 100 hours of engaging instructional content that aligns with selected CSTA, NGSS, CC, ISTE and other national standards.



### **Born in the Harvard Innovations Lab**



NeuroMaker began as a project by four Harvard students to create the world's most affordable, accessible and capable prosthetic hand. Using the actual prototypes from this project, our team of education professionals created a new kind of educational experience that goes beyond simple robotic toys and delivers a truly immersive and aspirational program to inspire boys and girls to enter the exciting fields that are creating next generation innovations.

## **NeuroMaker Benefits**



Reusable Hardware

The NeuroMaker Hand is fully reusable and can be leveraged



Advanced Standards-Based Curriculum

Engage and inspire learners across multiple STEM



No Recurring Fees

Once you join the NeuroMaker family, all the curriculum and



**NeuroMaker Competition** 

Each set is eligible for free registration into the remote



# **Everything You Need to Create a Unique STEM Solution.**

#### **Curriculum & Academic Materials**

**Project Guided Assembly**—Includes build instructions, connections to engineering concepts and checklists for proper builds.

**Biotech and Biomedical Exploration**–Explores prosthetics and biomedical concepts and introduces an open design challenge.

**Engineering Design**—Guides students through the engineering design process and introduces manufacturing and design concepts.

**Life and Physical Sciences**-Provides lessons and activities involving energy, mass and life sciences.

**Introduction to Programming**—Introduces students to block-based programming concepts and activities with and without hardware.

**Applied Artificial Intelligence**—Introduces Artificial Intelligence concepts and provides 6 biomedical AI activities and open challenges.

**3D Printing Exploration**—Use real world prosthetics design protocols to 3D print specialized digits, attachments and modifications to your NeuroMaker Hand.

## **Webinars and Learning Resources**

Discover dozens of sample lesson demos, informative webinars and interviews with education and neuroscience experts on the <a href="NeuroMaker Resources">NeuroMaker Resources</a> page.

## **NeuroMaker Creative Challenge**

Challenging students to research ways that technology can improve life for amputees and to then create their own prototypes to solve them with the STEM Kit and any other materials in the classroom. Participants can send us a video and written description of their solution virtually and we will be giving out over \$10,000 in prizes to those that are selected by our MIT and Harvard engineers! Participation is free to any group of students with our NeuroMaker Hand or NeuroMaker BCI.

## **Support & Professional Development**

The NeuroMaker team is there to support you every step of the way. We offer comprehensive professional development courses and lots of tips and tricks to get the most out of the kit and curriculum.