



## EZ-inMoov Robot Head



**EZ-Robot**

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### Summary

Building on the shoulders of giants, we have remixed the renowned inMoov Head design by Gael Langevin to seamlessly...

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Building on the shoulders of giants, we have remixed the renowned inMoov Head design by Gael Langevin to seamlessly integrate with EZ-Robot products, making it the perfect choice for researchers, educators, and robotics enthusiasts alike.

Gael Langevin's design: [Thing: 67676](#)

You can also find his inMoov design files [here](#)

We did our best to stick to the original design as closely as possible while adding our own flavor to the project at the same time.

**The Key Features of the [EZ-inMoov Robot Head](#) + [ARC Software](#):**

**Seamless Integration:** Our kit design allows the EZ-InMoov Robot Head to easily attach to an InMoov body.

**Complete Component Package:** The kit comes with all the necessary hardware and electronics to build a complete head, eliminating the need to source all the components individually. Simply download and 3D print the plastic components and build your robot head.

Component Kit available [here](#)

**3D Instructions:** Our Lego-like instructions make this project quite easy to build.

Instructions available [here](#)

**Simplified Design:** We've reengineered the head with fewer parts, it includes a unified internal bracket, fused glasses, and a simplified eye assembly featuring a camera inside one eye for enhanced computer vision capabilities.

**The Power is in Your Hands:** All the electronics and battery fit within the skull, allowing you to hold a self-contained, fully functioning robot head in the palm of your hands! There's also a 3D-printable mount to work on your robot head on a table or desk.

**Enhanced Movement:** Experience greater up/down eyeball movement range and a standard-sized servo for head side-to-side movement, saving space and cost.

**Immersive Audio:** A ported voice box and small speaker produce vibrant sound without the need for a large form-factor speaker.

**Customizable:** Modify the open-source 3D (STL) files to create your own unique features and upgrades. Add LEDs to light up your head and/or choose your own 3D filament colors to give the head your own unique style.

**IoTiny Integration:** Our IoTiny wireless Robot Controller connects the head to a mobile device or computer, allowing remote control, autonomous features, and networkability with other EZ-Robot controllers.

**Versatile Power Options:** Power the head with the included LiPo battery for portability or a 5-7.5VDC wall power adapter (not included) for continuous use without recharging.

**Comprehensive Software Suite:** The EZ-InMoov Robot Head is powered by Synthiam ARC software, allowing users of all skill levels to experiment with a broad range of A.I. including Microsoft's Cognitive Services and Open AI's ChatGPT (subscription required).

**Multiple Programming Languages:** Move beyond the free sample projects and program your robot head to perform complex human-robot interactions using JavaScript, Python, or Blockly.

**Mobile App Compatibility:** Control the head with ease using the ARC mobile app.

**Advanced AI Capabilities:** The EZ-InMoov Robot Head supports vision tracking, text-to-speech, speech recognition, and AI chatbot responses, including ChatGPT, for dynamic interactions.

**Emotional Intelligence:** Conduct cutting-edge research on human emotion detection with Microsoft cognitive face and emotion services.

The EZ-InMoov Robot Head is a game-changer in the DIY/educational robot market, opening up new possibilities for research and exploration while simplifying the building and programming process. With its combination of cutting-edge features and robust software integration, the EZ-InMoov Robot Head can help you achieve excellence in the world of robotics and AI.

There are two vision options for your EZ-InMoov Robot Head. The first option has the camera embedded in the eye, for a more "human" appearance. Users who want their robot head to utilize more advanced visual tracking and artificial intelligence may find it advantageous to build the robot head with a camera in the forehead. See the file "foreheadcameracutout.stl"

**Note:** EZ-Robot does not sell 3D-printed parts or design files.

## Print Settings

### Rafts:

Yes

### Supports:

No

### Infill:

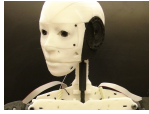
30

**Filament:** [Canadian Filaments](#)

You can find the instructions to build the head [here](#).

Category: Robotics

# This remix is based on



## Head for Robot InMoov

by Gael\_Langevin

## Model files



**topskullrightv5.stl**



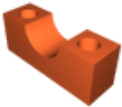
**jawhinge1\_wide.stl**



**topbackskullv5.stl**



**head\_stand\_ez-robot\_logo.stl**



**eyeholderv1.stl**



**powerclipv1.stl**



**skullservosupportv2.stl**



**batterysupportv1.stl**

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**eyeballsolidpupil.stl**

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**neckpistonfrontv2.stl**

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**unitedinternalsupportv1.stl**

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**neckplatev3.stl**

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**eyeballsupportv2.stl**

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**jawpistonv2.stl**

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**jawsupportv2.stl**

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**eyeballcamerapupil.stl**

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**eyesupportv6.stl**

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**sidehearv5.stl**

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**eyehingerightv3.stl**

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**eyeballv2.stl**

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**neckjointlowerv5.stl**

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**jawv5.stl**

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**lowbackv6.stl**

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**eyeballiris.stl**

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**eyeplatev2.stl**

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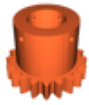
**topmouthv5.stl**

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**servogearv3.stl**

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**maingearv3.stl**

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**eyehingeleftv3.stl**

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**neckv3.stl**

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**neckplatehighv3.stl**

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**topskullleftv5.stl**

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**earrightv1.stl**

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**eyehingecurvev1.stl**

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**eyeglassv5.stl**

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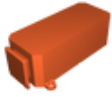
**foreheadcameracutout.stl**

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**earleftv1.stl**

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**voiceboxv1.stl**



**eyeballinsertv2.stl**



**ringv3.stl**



**pivotcup1.stl**

[Find source .stl files on Thingiverse.com](#)

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