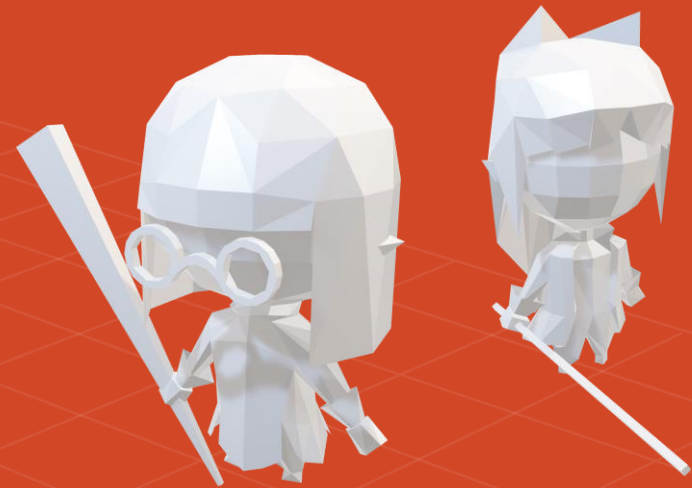


# Pemindaian dan Rekonstruksi Objek Tiga Dimensi

Memanfaatkan Microsoft Xbox One Kinect

Oleh Naufan Rusyda Faikar (1607645)

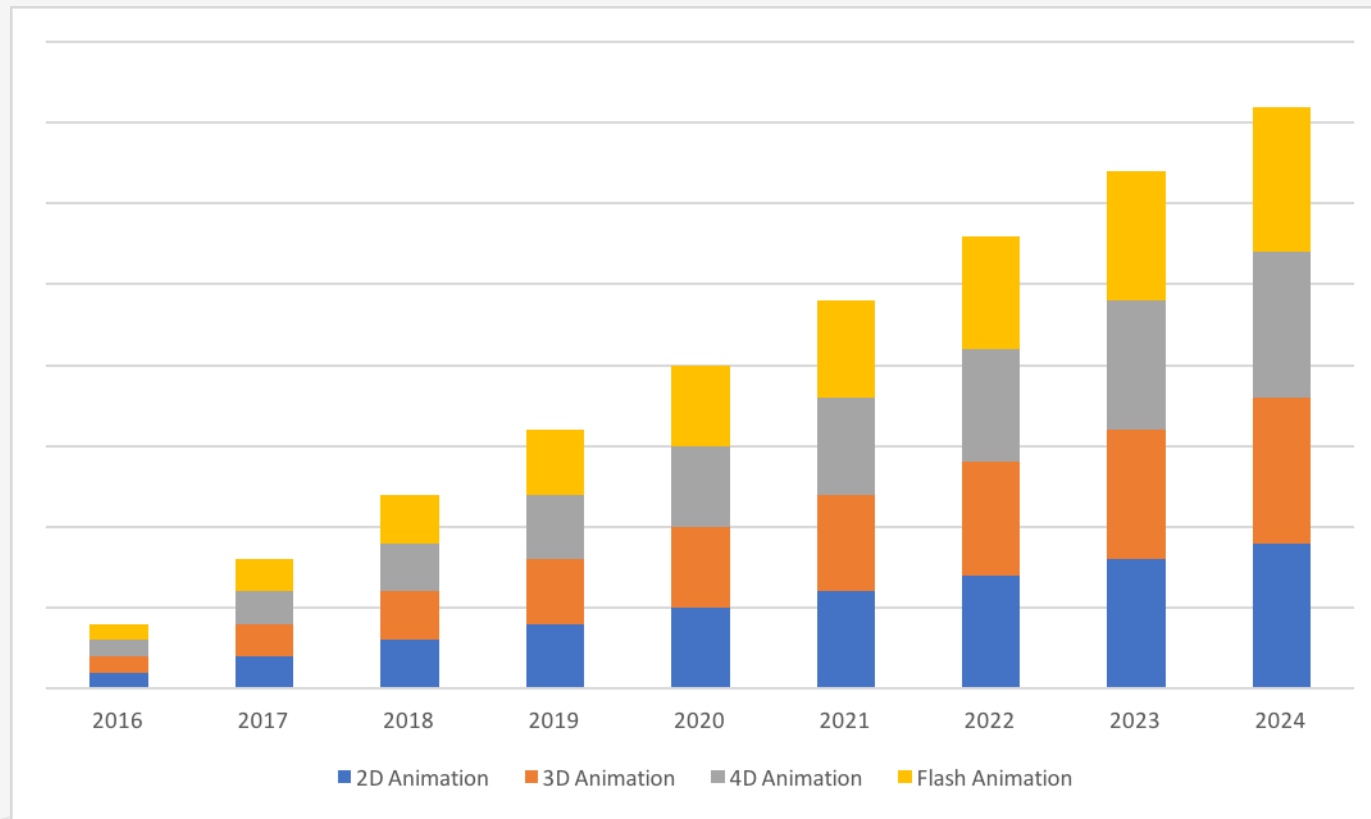


# Siapa yang Membutuhkan Konten 3D?

- Industri
- Medis
- Sains
- Seni dan Desain

# Industri: Pasar Animasi

---



<http://www.scientificanimations.com>

## Industri: Pemanfaatan Animasi (Hiburan, Iklan)

---



<https://www.syfy.com>

- Big Hero 6
- Apple Macbook



<https://www.youtube.com>

## Medis/Sains: Pemanfaatan Animasi (Simulasi)

---

The Good Doctor



<https://www.youtube.com>

## Industri: Pemanfaatan Konten 3D (Anime 2D)

---

Fate/Stay Night Heaven's Feel



<https://blog.sakugabooru.com>



## Industri: Pemanfaatan Konten 3D (Anime 2D)

---

Fate/Stay Night Heaven's Feel



<https://blog.sakugabooru.com>

## Industri: Pemanfaatan Konten 3D (Anime 2D)

---

Fate/Stay Night Heaven's Feel



<https://blog.sakugabooru.com>



## Industri: Pemanfaatan Konten 3D (*Open World Game*)

---

Assassin's Creed



[www.youtube.com](http://www.youtube.com)

## Industri: Pemanfaatan Konten 3D (*Open World Game*)

---

The Division



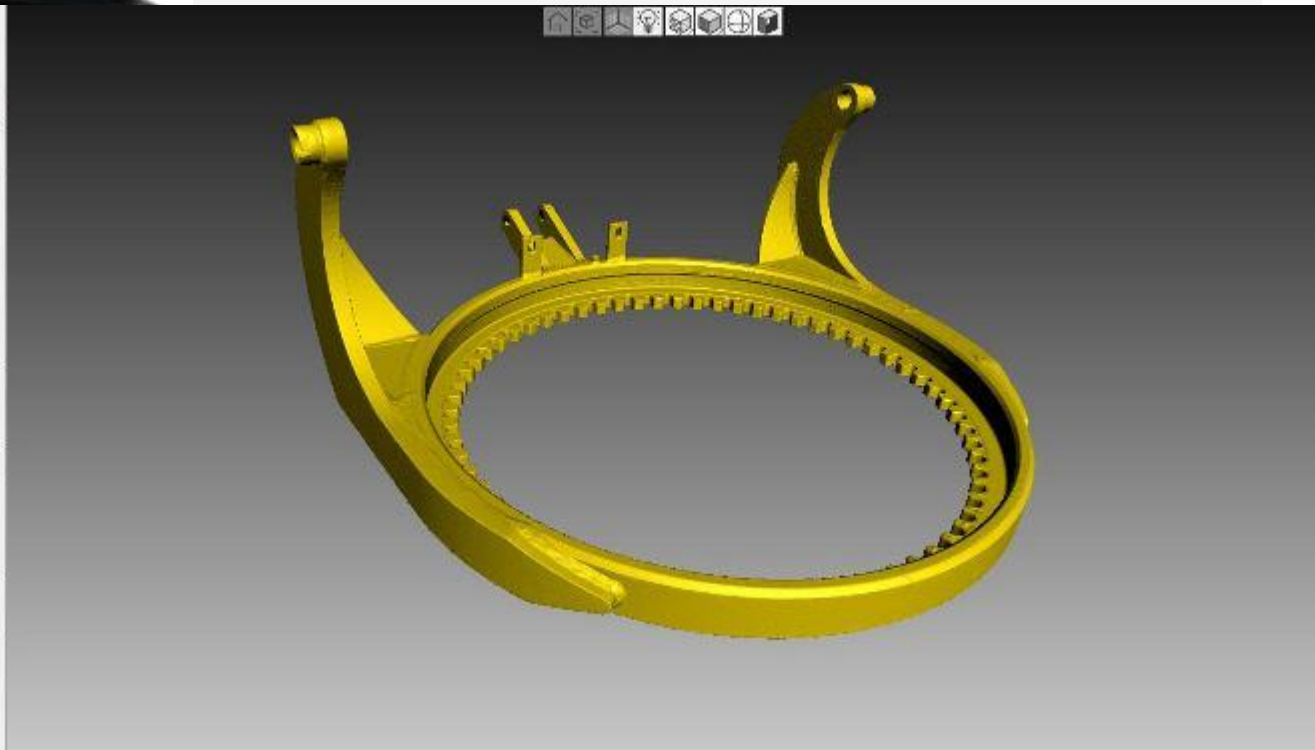
[www.youtube.com](http://www.youtube.com)



## Manufaktur: Pemanfaatan Konten 3D (Rekonstruksi Mesin)



<https://www.artec3d.com>



# Medis/Sains: Pemanfaatan Konten 3D (Rekonstruksi Wajah)

---

Kasus Katie Stubblefield



<https://www.nationalgeographic.com/magazine/2018/09/face-transplant-katie-stubblefield-surgery-timeline-interactive/>

---

Dan masih banyak lagi...

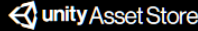


# Apa Masalahnya?


- Bayar gaji *modeller* mahal
- Beli model 3D mahal
- Waktu pembuatan model 3D panjang
- Pemindai 3D mahal





# \$22 USD untuk 1 Set Model Vegetasi







3D 2D Add-Ons Audio Templates Tools VFX

All Assets


Plus/Pro Impressive New Assets Bundles: Save 33% Shop On Old Store




Home > 3D > Vegetation > Plants > Nature Assets - Foliage Package



+61





LUGIA GAMES

## Nature Assets - Foliage Package

(not enough ratings) 1 user reviews

\$22

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Taxes/VAT calculated at checkout

This is also part of a bigger pack which can be found here: [Castle Ruins Environment - PBR Medieval Props and Vegetation](#)

A huge pack of vegetation/foilage, ready for your games.  
It is extremely optimized, polygon and texture-wise.  
It includes ferns, flowers, grasses and a few extra things.

Features:

- 43 unique meshes.
- 17 types of grass, 9 types of ivy, 8 types of flower, 4 types of fern, 5 misc types (a small bush, a lavender plant, a flytrap, a blackberry plant and ground leaves)
- All in one 4K atlas. Great detail without a lot of drawcalls!
- Low Polygon, game-ready models.
- PBR Textures.


4K Textures

Show More

Package contents

63.2 MB

Total file size	63.2 MB
Number of files	99



Package Preview

Releases

current ver. 1.0

Supported Unity versions

5.6.5 or higher

Support website

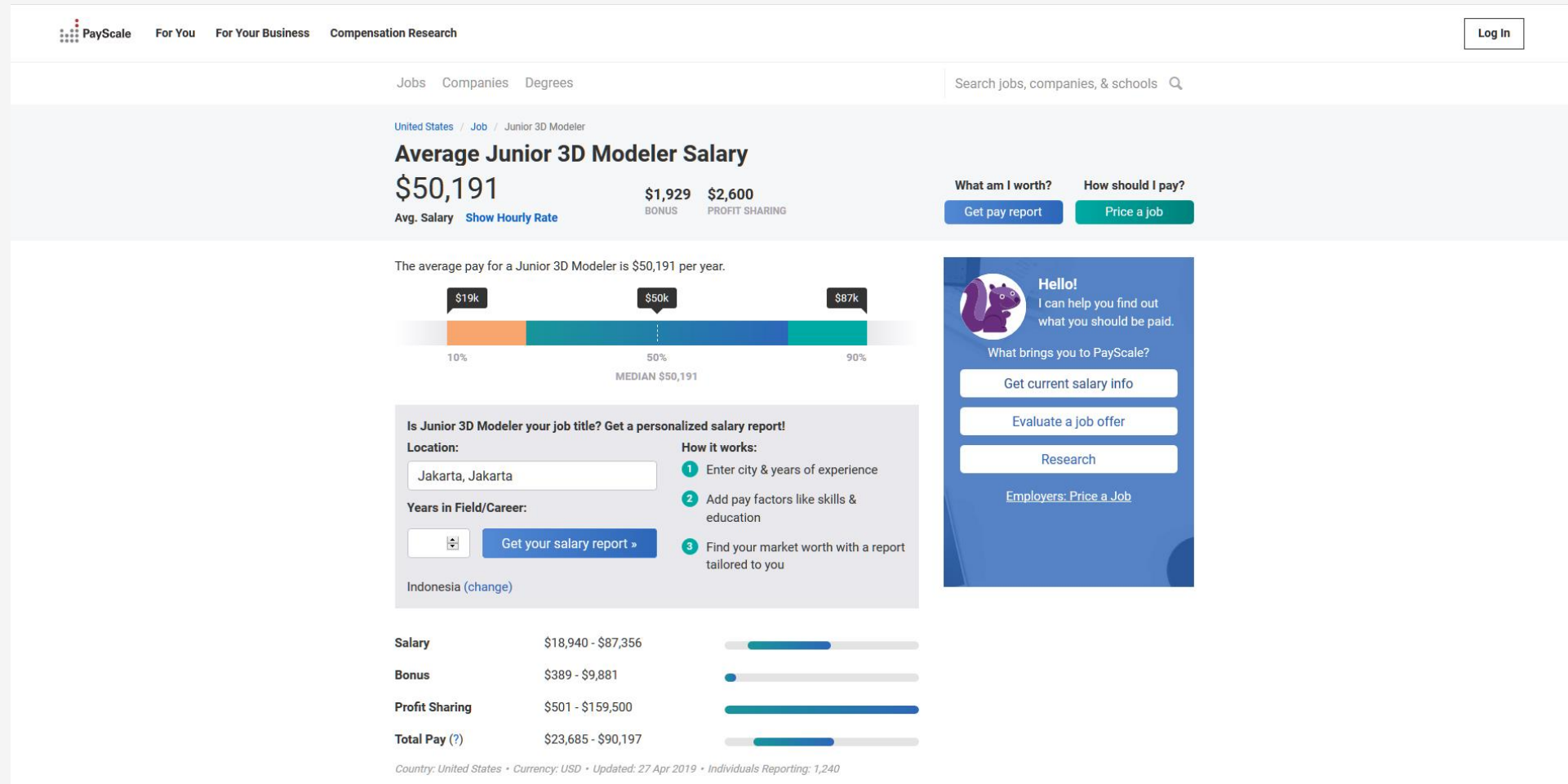
Publisher website

Share

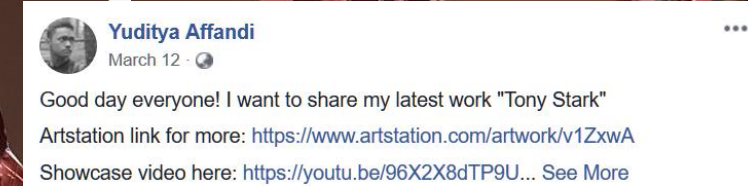
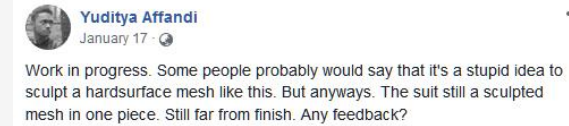
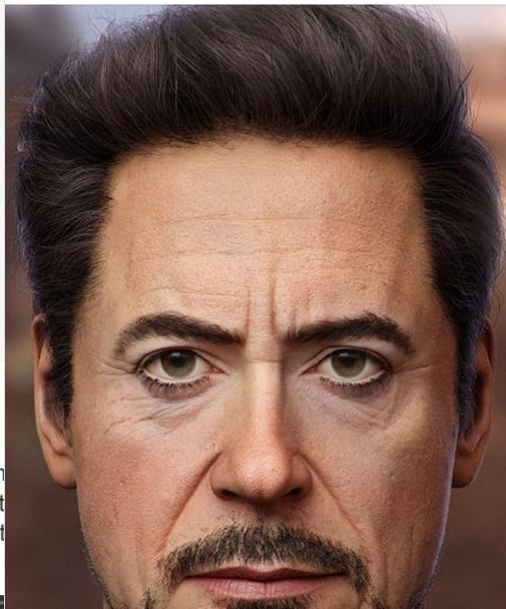
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# \$50.191 USD untuk Gaji Seorang *Junior 3D Modeller* per Tahun



# Modelling Membutuhkan Waktu yang Lama...




Postingan 30 Desember 2018-12 Maret 2019

Oleh Yuditya Affandi (20 tahun)



# \$25.800 untuk Sebuah Pemindai 3D

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This structured light 3D scanner is the ideal choice for making a quick, textured and accurate 3D model of medium sized objects such as a human bust, an alloy wheel, or a motorcycle exhaust system. It scans quickly, capturing precise measurements in high resolution.


Light, fast and versatile, Eva is our most popular scanner and a market leader in handheld 3D scanners. Based on safe-to-use structured light scanning technology, it is an excellent all round solution for capturing objects of almost any kind, including objects with black and shiny surfaces.

Artec Eva's ease of use, speed and precision has made it an essential product for a wide range of industries. From rapid prototyping to quality control, CGI to heritage preservation, the automotive industry to forensics, medicine and prosthetics to aerospace, the device is used to customize, innovate and streamline countless forward-thinking industries. Eva was even used to scan Barack Obama and help make the very first 3D portrait of an American president.


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2 YEAR  
WARRANTY



Bestselling handheld  
3D scanner on the  
market

# Apa Konteks Penelitian Ini?

Impor objek 3D pada dunia nyata ke dalam computer.

# State of the Art

## Automatic Reconstruction of 3D Objects Using a Mobile Monoscopic Camera

Wolfgang Niem, Jochen Wingbermühle

Universität Hannover  
Institut für Theoretische Nachrichtentechnik  
und Informationsverarbeitung  
Appelstr. 9A, 30167 Hannover

## Deep Single-View 3D Object Reconstruction with Visual Hull Embedding

Hanqing Wang<sup>\*1</sup> Jiaolong Yang<sup>2</sup> Wei Liang<sup>1</sup> Xin Tong<sup>2</sup>  
<sup>1</sup>Beijing Institute of Technology <sup>2</sup>Microsoft Research  
{hanqingwang, liangwei}@bit.edu.cn {jiaoyan, xtong}@microsoft.com

## RECONSTRUCTION, QUANTIFICATION, AND VISUALIZATION OF FOREST CANOPY BASED ON 3D TRIANGULATIONS OF AIRBORNE LASER SCANNING POINT DATA

J. Vauhkonen<sup>a,b,\*</sup>

<sup>a</sup> University of Eastern Finland, School of Forest Sciences, Yliopistokatu 7 (P.O. Box 111), FI-80101 Joensuu, Finland – jari.vauhkonen@uef.fi

<sup>b</sup> University of Helsinki, Department of Forest Sciences, Latokartanonkaari 7 (P.O. Box 27), FI-00014 Helsinki, Finland

Commission III, WG III/4

## Automatic Reconstruction of Surfaces and Scalar Fields from 3D Scans<sup>1 2</sup>

Chandrajit L. Bajaj<sup>3</sup> Fausto Bernardini<sup>3 4</sup> Guoliang Xu<sup>5</sup>

Department of Computer Sciences  
Purdue University

## 3D Object Reconstruction from a Single Depth View with Adversarial Learning

Bo Yang University of Oxford bo.yang@cs.ox.ac.uk	Hongkai Wen University of Warwick hongkai.wen@dcswarwick.ac.uk	Sen Wang Heriot-Watt University s.wang@hw.ac.uk
Ronald Clark Imperial College London ronald.clark@imperial.ac.uk	Andrew Markham University of Oxford andrew.markham@cs.ox.ac.uk	Niki Trigoni University of Oxford niki.trigoni@cs.ox.ac.uk

## Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions

Erik Bylow\*, Jürgen Sturm<sup>†</sup>, Christian Kerl<sup>†</sup>, Fredrik Kahl\*  
and Daniel Cremers<sup>†</sup>

<sup>\*</sup>Center for Mathematical Sciences, Lund University, Lund, Sweden  
Email: erikb@maths.lth.se, fredrik@maths.lth.se

<sup>†</sup> Department of Computer Science, Technical University of Munich, Garching, Germany  
Email: juergen.sturm@in.tum.de, christian.kerl@in.tum.de, cremers@in.tum.de



# Apa Tujuan Penelitian Ini?

- Meminimalkan biaya yang dikeluarkan
- Meminimalkan waktu yang dihabiskan

Dengan cara bagaimana?

- Memilih pemindai 3D yang murah dan akurat
- Mengotomatisasi proses rekonstruksi objek 3D

# Microsoft Xbox One Kinect



## KINECT XBOX ONE / XBOX ONE KINECT

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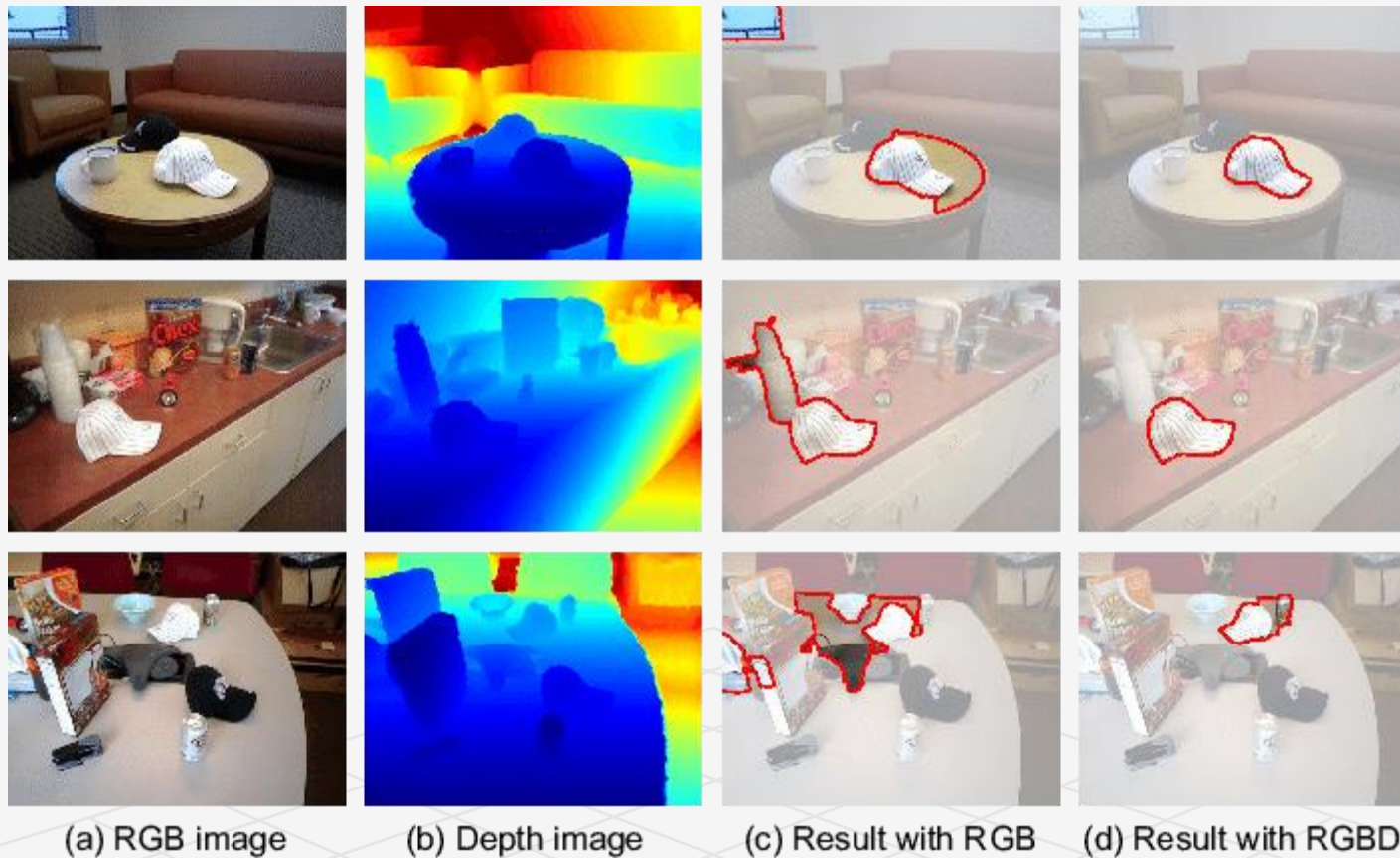
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Catatan Toko

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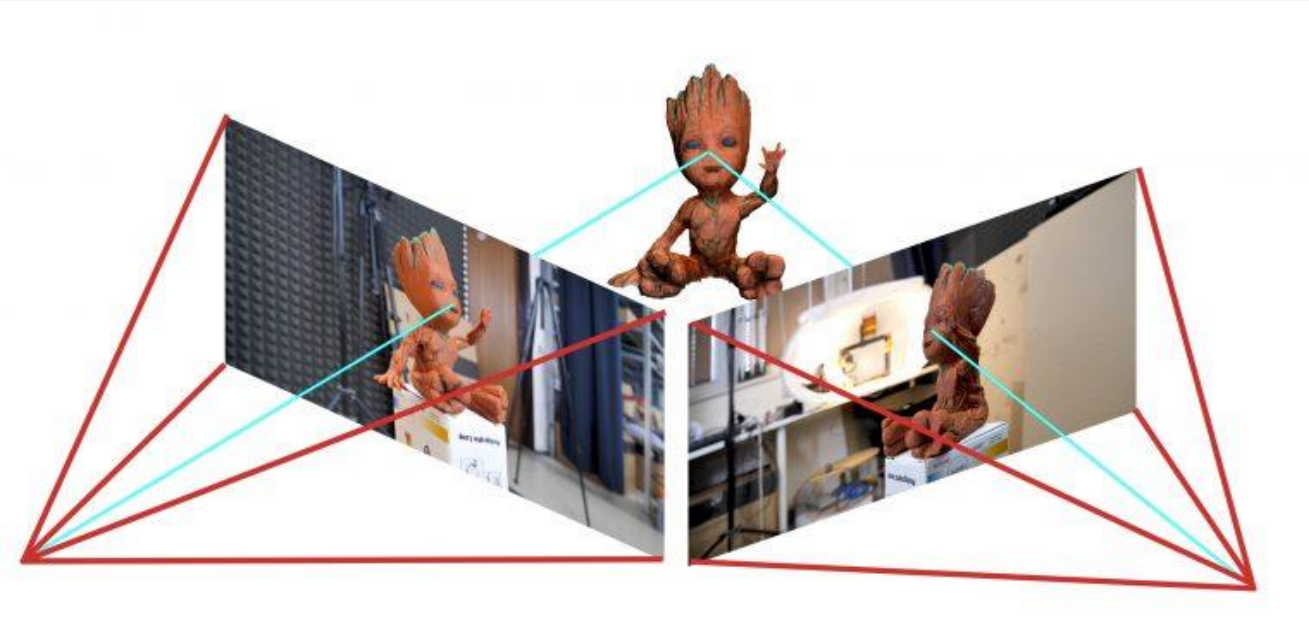
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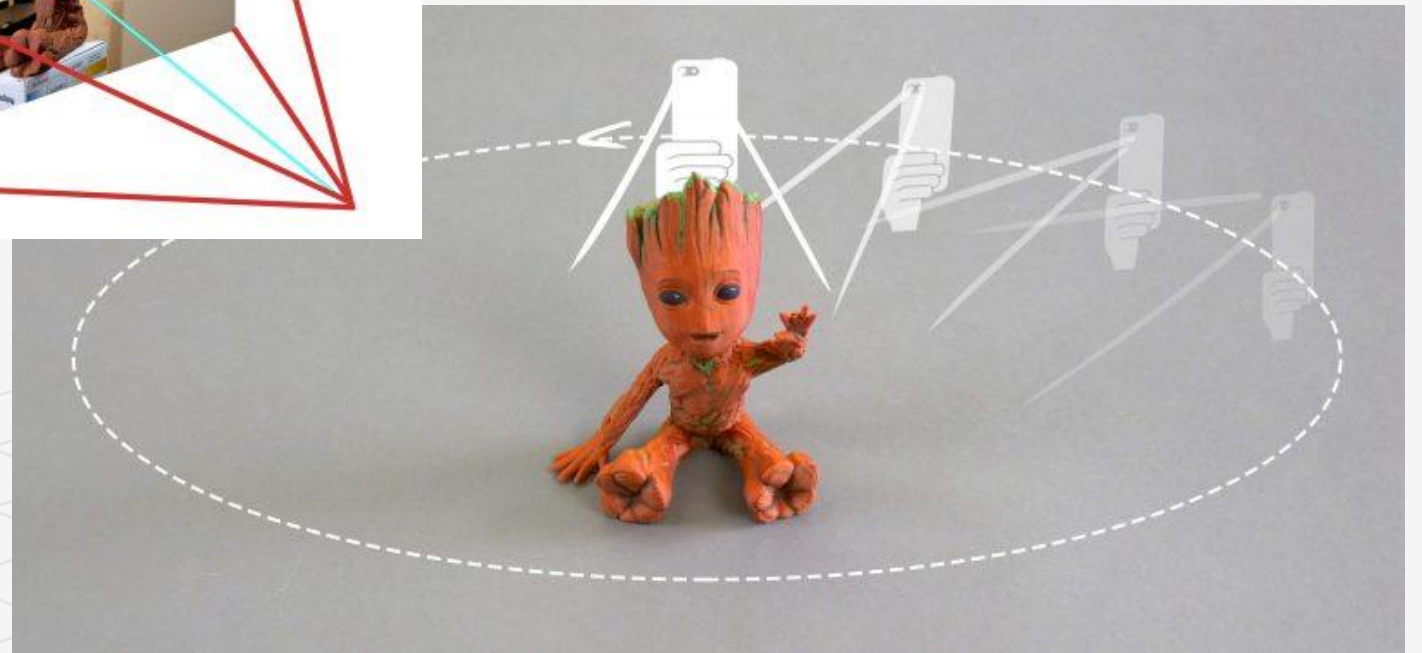
researchgate.net

# Fotogrametri (Step 1)

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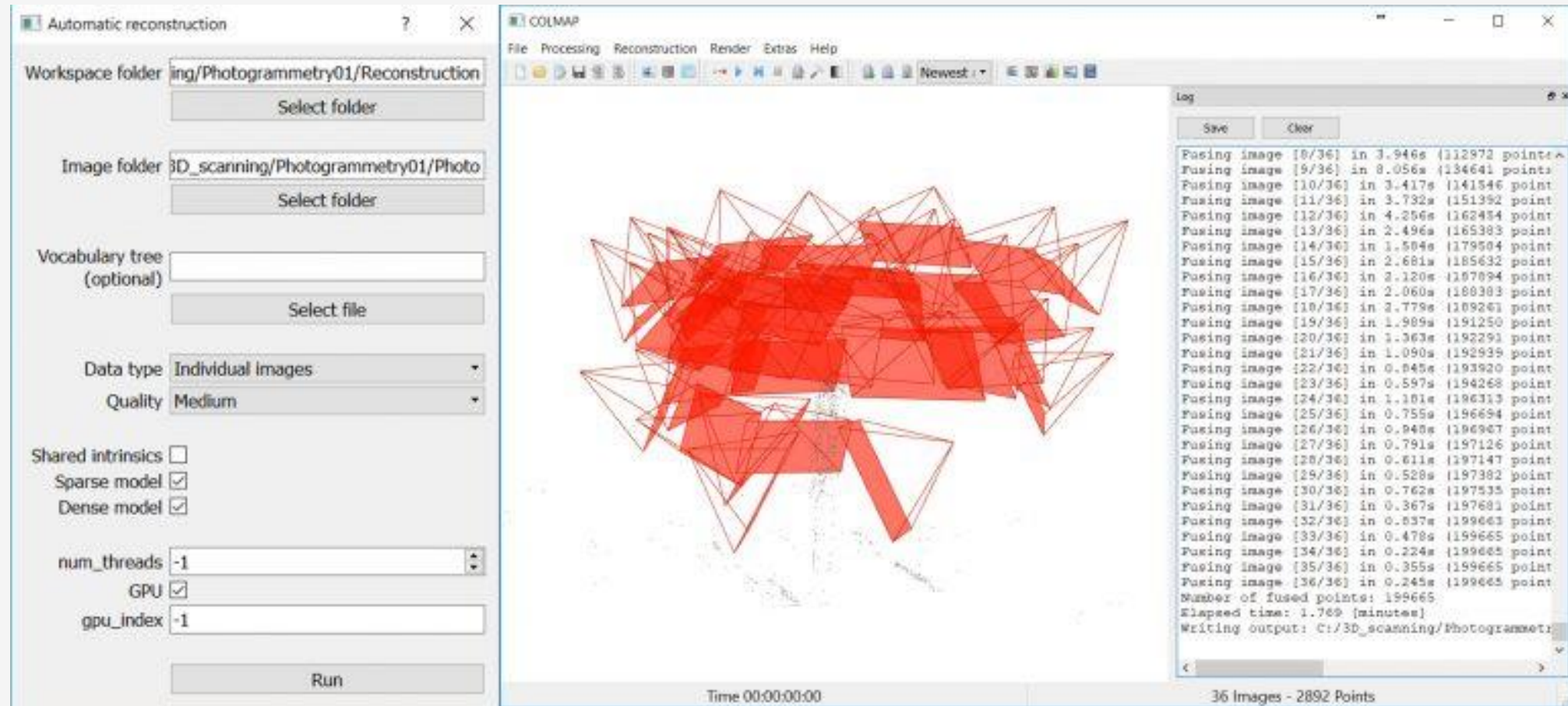


<https://blog.prusaprinters.org/>





# Fotogrametri (Step 2)



<https://blog.prusaprinters.org/>

## Fotogrametri (Step 3)

---



<https://blog.prusaprinters.org/>



Selesai.

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