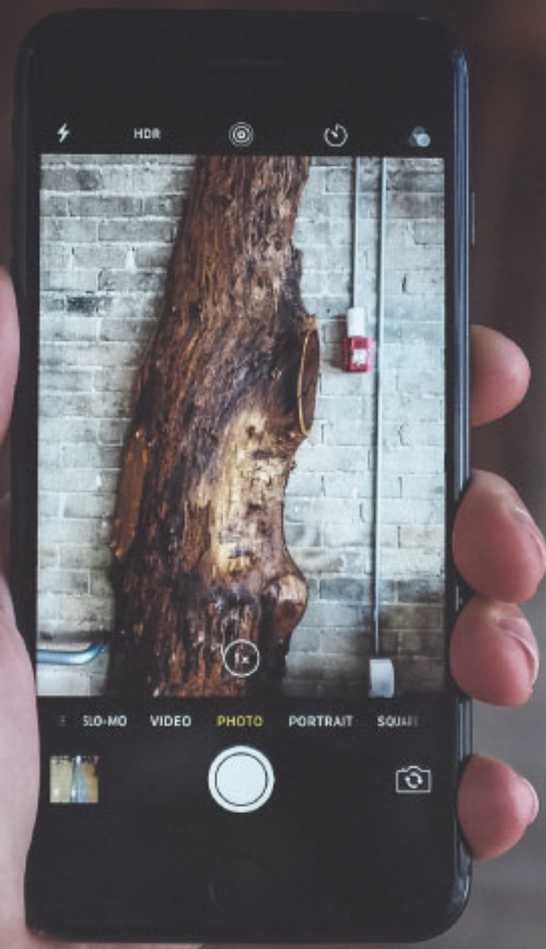
Welcome to BVS.

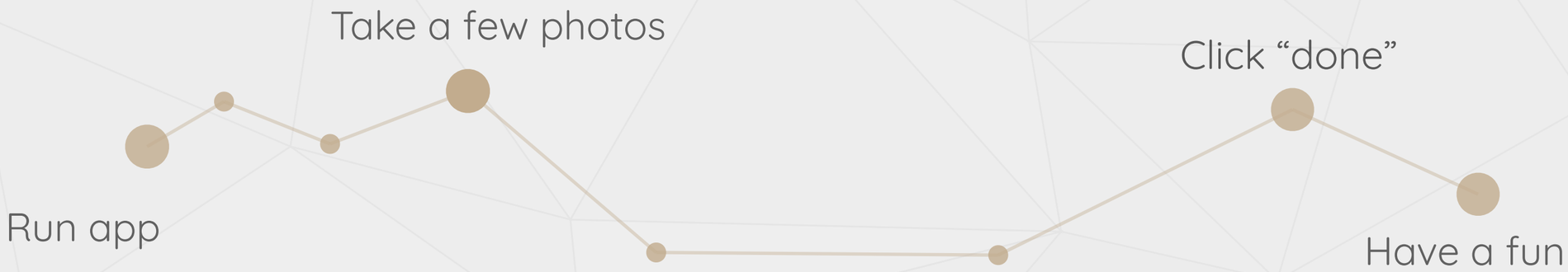


BVS

What is BVS project?

That’s vision sytem consisting of several independent programs cooporates each other. Created for transfer real to 3D digital world.

The main aid of project is to show how many opportunities creates computer vision, image processing systems and techniques such as structure from motion.

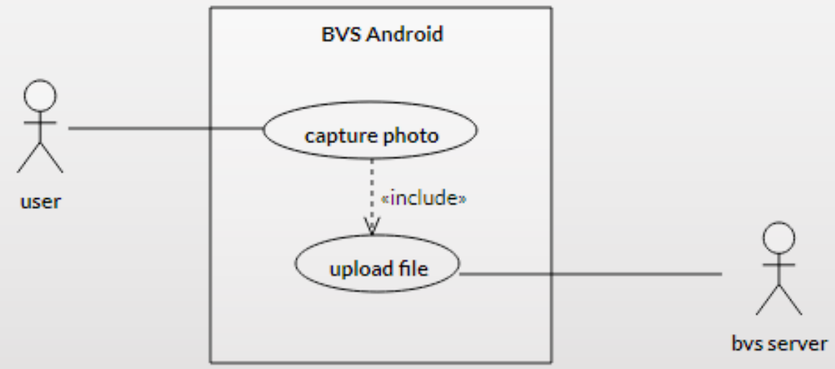


Capture photo

UMLUseCaseDiagram

BVS Android: Camera Fragment :: Scenarios :: Capture photo

Diagram



Description

RELATED REQUIREMENTS: -

GOAL IN CONTEXT: user capture photo

PRECONDITIONS: camera is active fragment camera device is accessible

SUCCESSFUL END CONDITIONS: photo is captured and sent to server

FAILED END CONDITION: user see information about failure reason

TRIGGER: user click capture photo button

MAIN FLOW: STEP, ACTION 1. photo is taken 2. include::upload file

Properties

Name	Value
name	Capture photo

Model–based development

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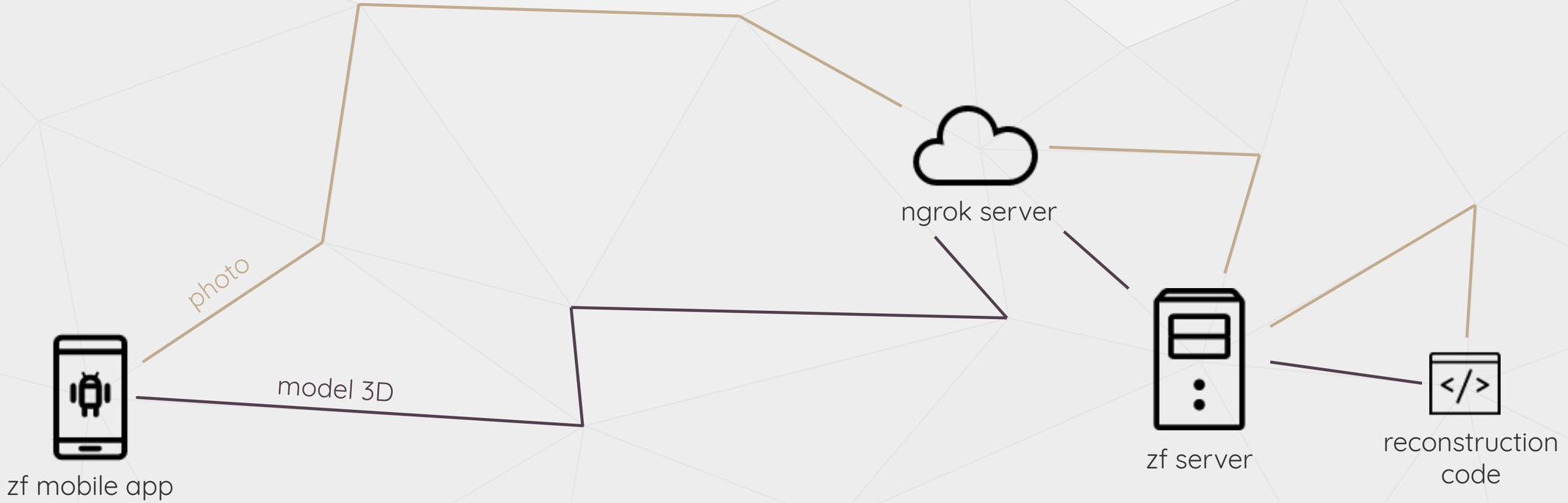
How does BVS works?

During startup mobile application, it init connection with remote server about 20km from Czestochowa.

Every time you take photo, it is automatically sent in background to server.

When you click done button, server call special program which reconstruct photographed object.

After reconstruction server will send back your model and you will see it on the smatphone screen.



Back to Dashboard
Status
Changes
Workspace
Build Now
Delete Project
Configure

Build History trend

find x

#4	Jul 18, 2017 5:41 PM
#3	Jul 8, 2017 8:10 PM
#2	Jul 8, 2017 8:09 PM
#1	Jul 8, 2017 8:07 PM

RSS for all RSS for failures

Project MikoTools

Custom c++ library uses by bvs recon.

Workspace

Recent Changes

Permalinks

- Last build (#4), 2 days 19 hr ago
- Last stable build (#4), 2 days 19 hr ago
- Last successful build (#4), 2 days 19 hr ago
- Last failed build (#2), 12 days ago
- Last unsuccessful build (#2), 12 days ago
- Last completed build (#4), 2 days 19 hr ago

Continuous test-driven development

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How is BVS built?

BVS contains several independent programs written in different programming languages, using many different frameworks and libraries. Despite this diversity and indepedeces of subprograms, they communicate with each other to form computer vision system.

Such an approach seems difficult and complex but allow to choose dedicated set of tools to solve specific problem.

Android, JNI
java, c++, c

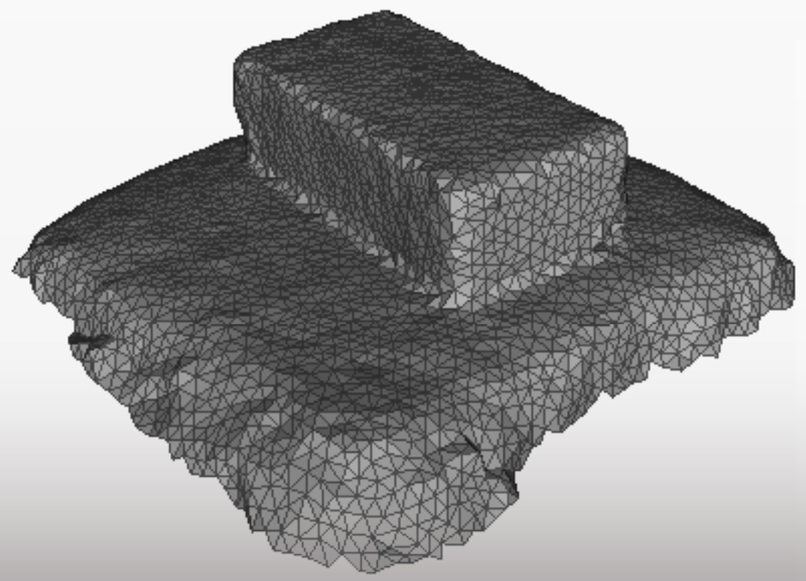
mobile app

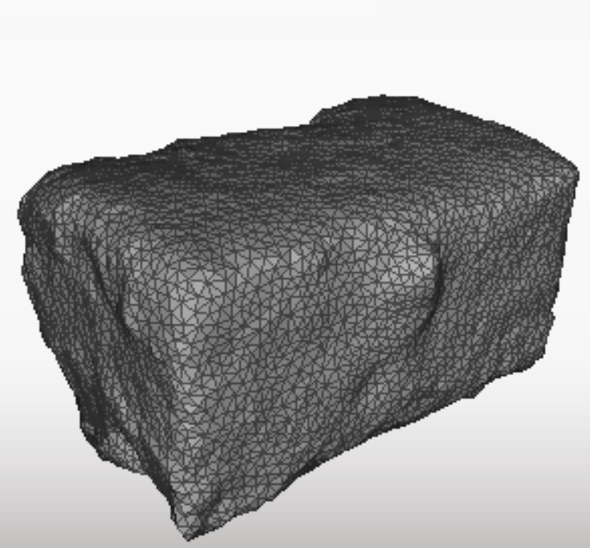
Node.js, Express.js
javascript

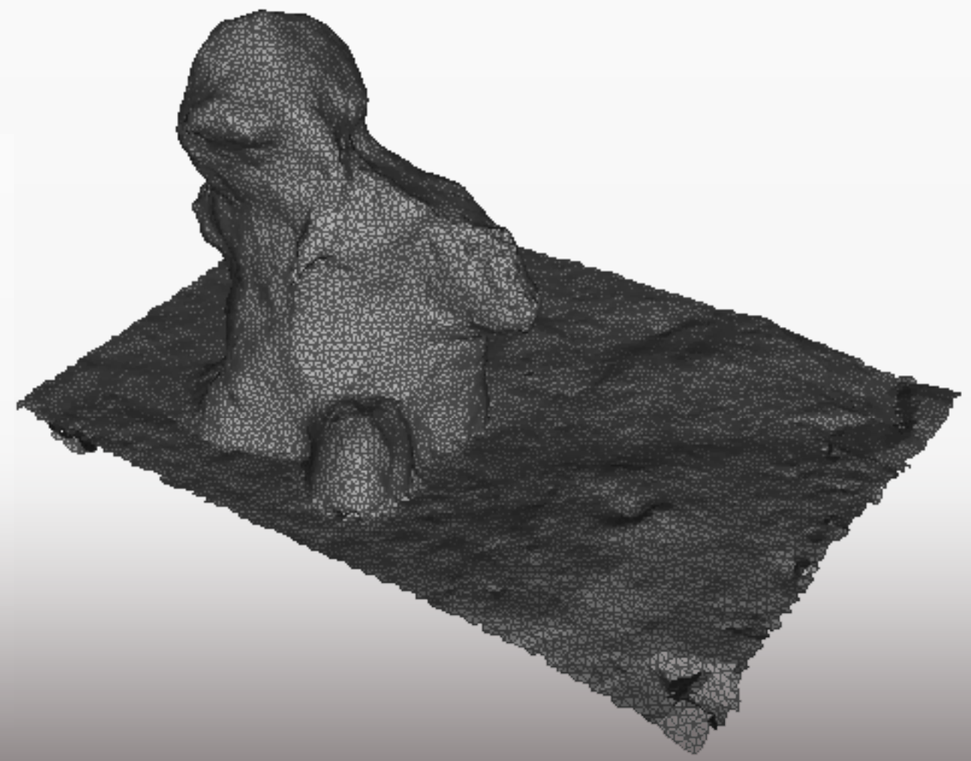
app server

Qt, Mathematica
c++, c

reconstruction code







Visualisation

BVS

About

I am a fan of old thick books, neat graphics and minimalism. Programming is my hobby and private abstract world where i often stops for a moment to create next subworlds.

BVS is continuation of my engineer's thesis. The main aid of project is to show how many opportunities creates computer vision, image processing systems and techniques such as structure from motion.

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