

# The Damped Bundle Adjustment Toolbox

## v0.1 for Matlab

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## 1 Introduction

### 1.1 Purpose

Matlab toolbox with freely available code for bundle adjustment. Intention to be state-of-the-art.

## 1.2 Limitations

What it can do.

What it cannot do.

## 1.3 Legal

Licensing.

## 1.4 Scientific publications

Refer to any of the papers...

# 2 Installation

- Download the package file `dbat_0.1.zip`.
- Unpack the package into a directory *dbat*.
- Inside Matlab, do the following:  

```
cd dbat % the directory where you installed the files.  
dbatSetup % set paths, etc.  
loadplotdemo % installation test demo
```
- If `loadplotdemo` runs without error and generates a figure with a camera network, the installation is ok.

# 3 Usage

## 3.1 Demos

### 3.1.1 loadplotdemo

### 3.1.2 romabundledemo

### 3.1.3 camcalibdemo

## 3.2 Using your own data

### 3.2.1 Enabling text export from Photomodeler

### 3.2.2 Export from Photomodeler

### 3.2.3 Updating the export file

### 3.2.4 Loading into Matlab

# A Camera model