Resource Summary Report

Generated by dkNET on Sep 14, 2026

Insect Vision 1.0.1

DOI:10.17504/protocols.io.y9hfz36
Type: Protocol

Proper Citation

Evripidis Gkanias, Benjamin Risse, Michael Mangan, Barbara Webb 2019. Insect Vision 1.0.1. protocols.io dx.doi.org/10.17504/protocols.io.y9hfz36

Protocol Information

URL: https://dx.doi.org/10.17504/protocols.io.y9hfz36

Authors: Evripidis Gkanias, Benjamin Risse, Michael Mangan, Barbara Webb

Summary: InsectVisionComputer Vision Toolbox for Insect VisionVersion 1.0.1This version has been created as support for the article:Gkanias E., Risse B., Mangan M., and Webb B. (2019) From skylight input to behavioural output: a computational model of the insect polarised light compass. PLOS Computational Biology.To be able to run all the experiments and replicate the results presented in the article, the compmodels package is needed. If you don't have access to this package, please contact the authors.Clone both repositories and set the compmodels as a dependence to the insectvision package.To see the results, it is not necessary to run the code. By simply opening the notebooks/plos.ipynb file, the plots should be automatically generated for you to observe them.To create the plots by yourself, you need to start a Jupyter notebook kernel at the root of the package. Then run the notebooks/plos.ipynb file, which already contains all the plots and the respective code to replicate them. Some plots (especially the ones related to the global optimisation) may need a long time to run; this does not mean that they do not work.All the code has been implemented by Evripidis Gkanias.You can go the github repository by following this link. The release version is attached and it can also be found here.

Associated Publications: Gkanias E, Risse B, Mangan M, Webb B (2019) From skylight input to behavioural output: A computational model of the insect polarised light compass. PLoS Comput Biol 15(7): e1007123. doi: 10.1371/journal.pcbi.1007123

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External URL: https://github.com/InsectRobotics/insectvision/tree/version-1.0.1

Version: 1

Publication Date: 2019

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Record Creation Time: 20210329T220522+0000

Record Last Update: 20210329T220856+0000

Data and Source Information

Source: