

RovioSh – A new dimension for Rovio & Interface with various frameworks

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WowWee Rovio

- A Spy-Robot with 3 Wheels, Camera, Radar, Webserver, Localization Sensor, Home Base with Beacon (For Navigation), WiFi card, etc.
- Applications – Live Video Streaming, Remotely controlled, Automatic Docking, Storage of Predefined Paths, Easy Control, etc.
- Rovio's Web Interface – For Commercial purposes – [Look & Feel](#)
- Does WowWee provide anything for advanced users/Research ??

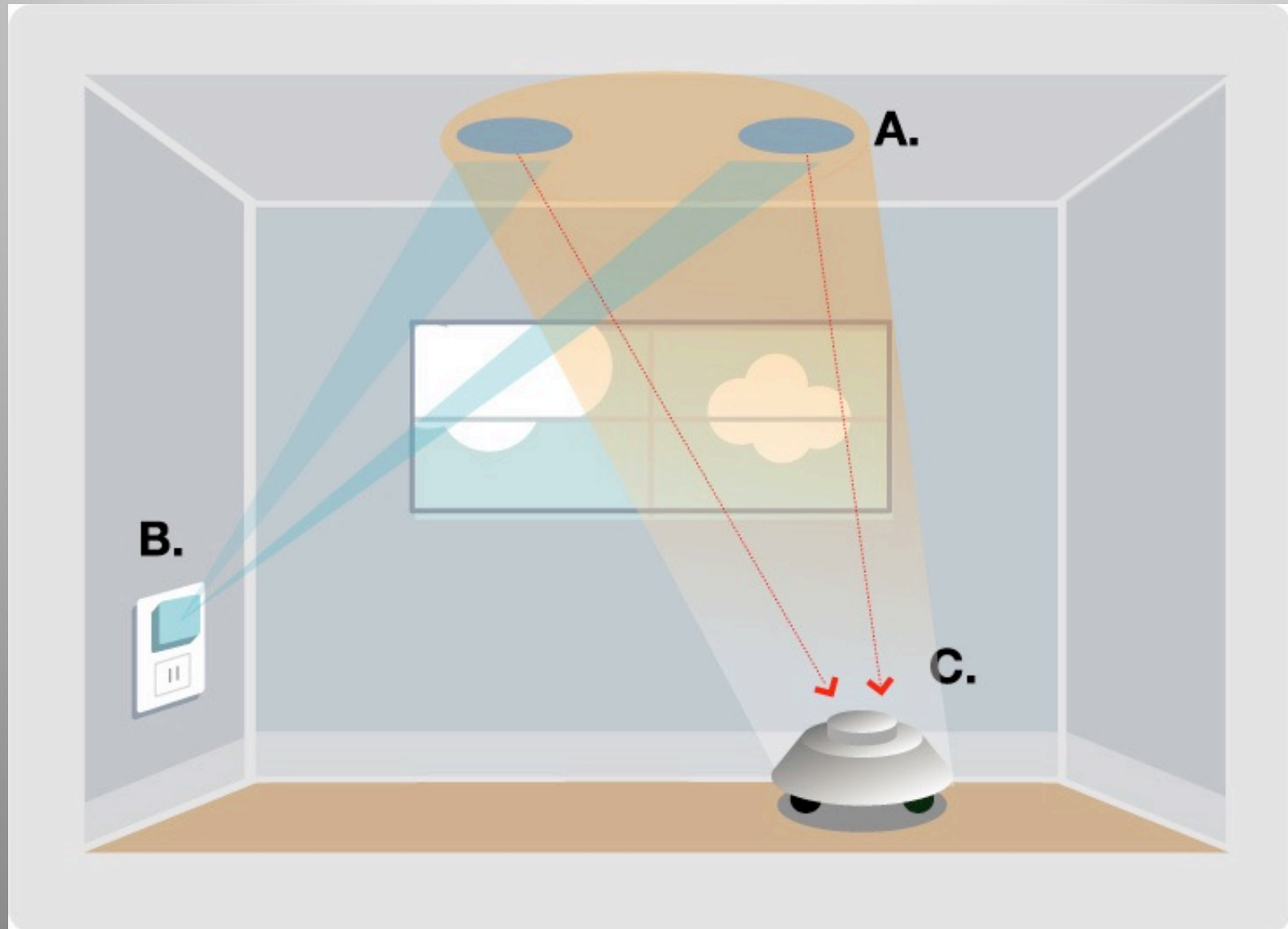
WowWee Rovio API 1.2

- With a Consumer PC – Makes Rovio to work beyond its Limitations.
- What's there in this API - ?? [Peek inside](#)
- Input - Simple URL with http protocol executing predefined cgi scripts
- Output – Return/Response values in basic data types
- API Requirements - All you need is IP and Rovio Credentials...
- How do you build on this??

RovioSh – Under Development

Application	Wrapper/Programming Language/API
Global Movement Path - Tracking Rovio	MATLAB
Obstacle Detection & Self navigation	.NET (RovioLib)
Auto Docking for Dynamic Home Base	Robo Realm
Speech interaction	.NET (RovioWrap)
RovioSh Interface	.NET (RovioLib)

Tracking Rovio Movement – NS Sensor



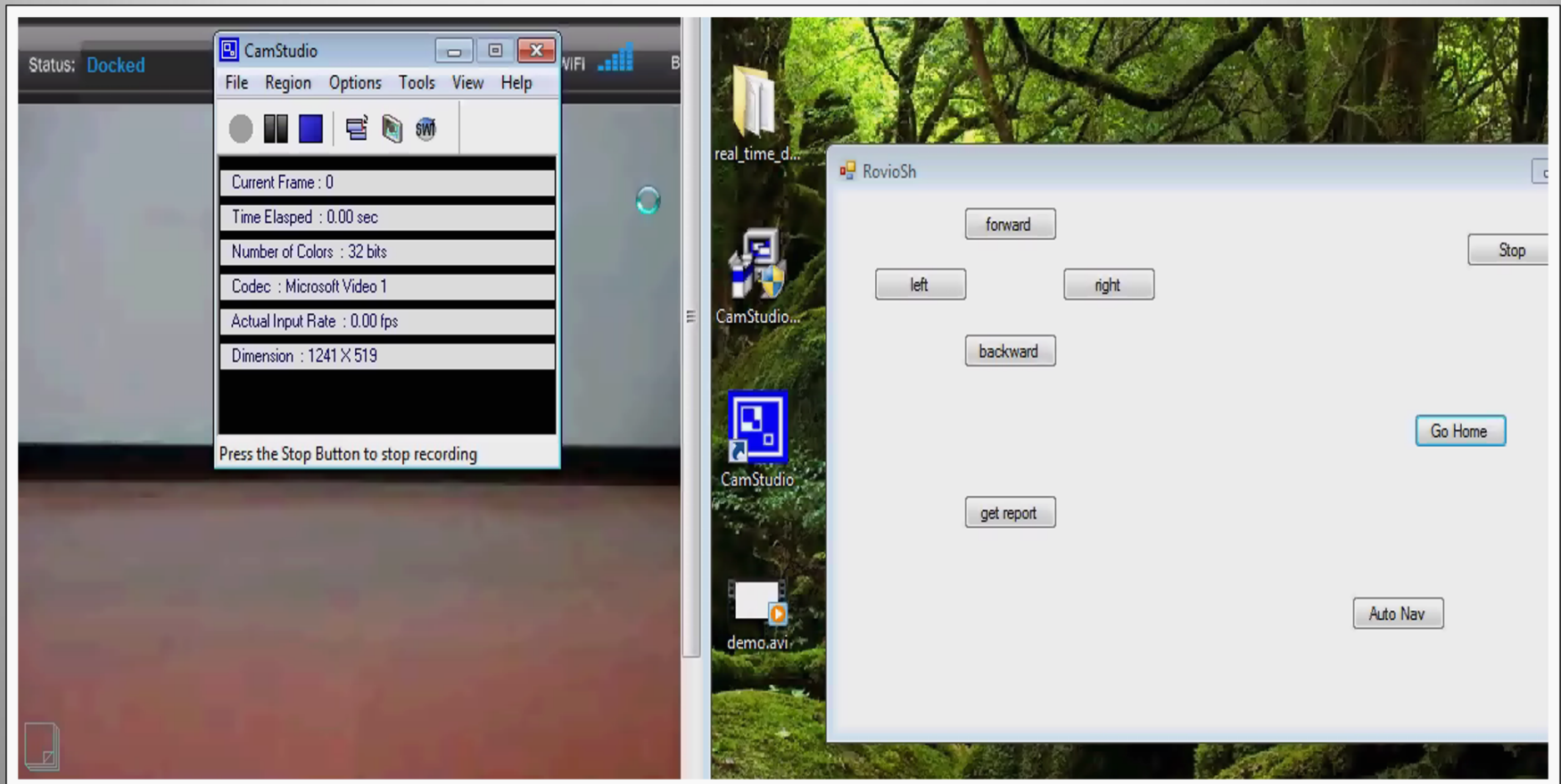
Tracking Rovio Movement – NS Sensor

- Requirements – Clear view of IR Projections & Detector in Field of View
- Determine the Axis of tracking system.
- Mapping home base to Origin of system.
- Transformation of Dimensionless quantity to metric units (53 units = 1cm)
- Get Input data into MATLAB from Rovio API
- Segment the X and Y data
- Export it to a [txt format](#) with delimiters
- Use a Real time plotting software.

Tracking Rovio Movement – NS Sensor



RovioSh Interface



The End

- References

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