FabScan Pi
An open-hardware stand-alone web-enabled 3D scanner

Mario Lukas
Motivation
Developers Nightmares
Developers Landscape

Web Front-End Developers
Node.js & Python Developers
Processing Developers
Native Language Developers
Product Designers

Source: Andy Carle - JavaScript for IoT Development from Concept to Production

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Recipe for the FabScan Pi

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Hardware
Software

Web-Enabled UI

REST API        WebSocket API

Back-End Server

G-Code Protocol

FabScan Pi HAT Firmware
Web-Enabled User Interface
Web-Enabled User Interface

New Scan
Web-Enabled User Interface

Live Laser Detection

Settings
Web-Enabled User Interface
Web-Enabled User Interface

Scan
Related
Options

Download PLY
Load settings
Delete
Upload to Thingiverse

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Web-Enabled User Interface
Web-Enabled User Interface

Recent
Scans

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Scanning

Demo
Further Recipes
Summery

http://hci.rwth-aachen.de/fabscanpi

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Back-End Architecture

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