

# **Beaglebone By Example**

Jayakarthigeyan Prabakar

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#### Beaglebone By Example Jayakarthigeyan Prabakar

#### **Key Features**

- Get to grips with the fundamentals of BeagleBone
- Leverage Python scripts to program BeagleBone for your requirements
- Build four exciting projects, from home automation to a tele-controlled robot

#### **Book Description**

BeagleBone is a low cost, community-supported development platform to develop a variety of electronic projects. This book will introduce you to BeagleBone and get you building fun, cool, and innovative projects with it. Start with the specifications of BeagleBone Black and its operating systems, then get to grips with the GPIOs available in BeagleBone Black. Work through four types of exciting projects: building real-time physical computing systems, home automation, image processing for a security system, and building your own tele-controlled robot and learn the fundamentals of a variety of projects in a single book.

By the end of this book, you will be able to write code for BeagleBone in order to operate hardware and impart decision-making capabilities with the help of efficient coding in Python.

#### What you will learn

- Program on BeagleBone Black using Python
- Interface sensors and actuators to BeagleBone Black
- Build your own real-time physical computing systems
- Connect physical computing systems to cloud servers
- Build your own home automation and home security system
- Build your own tele-controlled robot with real-time video streaming

#### **About the Author**

**Jayakarthigeyan Prabakar** is an electrical and electronics engineer with more than three years of experience in real-time embedded systems development. He loves building cloud-connected physical computing systems using Arduino, MSP430, Raspberry Pi, BeagleBone Black, Intel Edison, ESP8266 and more.

Jayakarthigeyan started understanding how computing devices and operating systems work when he started repairing his personal computer on his own in middle school that is when he first got his hands on in electronics.

From his third year in the undergraduate degree program, he started building prototypes for various start-ups around the world as a freelancer. Currently, Jayakarthigeyan is a full-time technical lead of the R & D division in a Home Automation startup and works as a consultant to many other companies involved in Robotics, Industrial Automation and other IoT solutions as well; he helps build prototypes to bring their ideas to reality.

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