



1600 XP

# Connecting IoT devices to Azure AI services using Azure Functions

1 hr 16 min • Module13 Units

Intermediate

AI Edge Engineer

Azure IoT Hub

Create and deploy an Azure function to make a language translation IoT device. The function will use Cognitive Speech Service. Your device will record a voice in a foreign language and convert the speech to a target language.

## Learning objectives

In this module, you will:

- Configure an IoT device to an IoT Hub
- Integrate Cognitive Speech Service into an Azure function
- Deploy an Azure function app
- Test your Azure function app with an IoT device

*"Produced in partnership with the University of Oxford – Ajit Jaokar, Artificial Intelligence: Cloud and Edge Implementations course."*

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## Prerequisites

- Familiarity with Azure
- Basic understanding of IoT
- Basic knowledge of Azure Functions
- Basic knowledge of Azure AI services
- A MXChip IoT DevKit board with a Micro-USB cable
- A computer running Windows 10, macOS 10.10+ or Ubuntu 18.04+
- An active Azure subscription
- Visual Studio Code installed on your computer

- Arduino IDE installed on your computer
- .NET SDK installed on your computer

## This module is part of these learning paths

[AI edge engineer](#)

### Introduction

4 min

### Design Azure AI services using Azure Functions

6 min

### How to configure IoT device to the IoT Hub

5 min

### Exercise - Configuring IoT device to the IoT Hub

10 min

### Knowledge check

5 min

### How to create Azure AI services

4 min

### How to deploy Azure Functions

4 min

### How to deploy device code to the IoT device

5 min

### Exercise - Deploying Azure AI services as Azure Functions to the IoT device

15 min

### Knowledge check

5 min

### Exercise - Customizing Azure AI services as Azure Functions

7 min

### Knowledge check

3 min

### Summary

3 min

