Record Nr. UNINA9910585772703321 Autore Bell Charles Titolo Beginning MicroPython with the Raspberry Pi Pico: Build Electronics and IoT Projects / / by Charles Bell Berkeley, CA:,: Apress:,: Imprint: Apress,, 2022 Pubbl/distr/stampa **ISBN** 9781484281352 1484281357 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (645 pages): illustrations Collana Maker Innovations Series, , 2948-2550 Disciplina 005.453 Soggetti Raspberry Pi (Computer) Python (Computer program language) Application software - Development Microcomputers - Programming Computer programming Microcontrollers Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Chapter 1: Introducing the Raspberry Pi Pico -- Chapter 2: Introducing Nota di contenuto MicroPython -- Chapter 3: How to Program in MicroPython -- Chapter 4: Low-Level Hardware Support -- Chapter 5: Electronics for Beginners -- Chapter 6: Project: Hello, World! MicroPython Style -- Chapter 7: Project: Pedestrian Crossing -- Chapter 8: Project: Soil Moisture Monitor -- Chapter 9: Introducing Grove -- Chapter 10: Project: Sound Activated Lights -- Chapter 11: Project: Simon Game -- Chapter 12: Example: Monitoring your Environment -- Chapter 13. Introducing IoT for the Cloud -- Chapter 14. Using ThingSpeak. Sommario/riassunto Program the Raspberry Pi Pico, the latest microcontroller board from raspberrypi.org, with MicroPython. This book will take you on a tour of the Raspberry Pi Pico, including how to get started using the microcontroller, seeing which alternative microcontrollers are available. and how to connect and run simple code examples. You'll program

example projects in MicroPython using Python on your PC as a learning platform. Then build your hardware skillset working with electronics and breadboard circuits. You'll implement example projects with all

steps explained, including hardware connections and executing the project. Then apply them to real-world, approachable projects using the accessible Raspberry Pi Pico! The book shows how the cloud is used for IoT data and find out what popular cloud systems currently exist for IoT. Finally, you'll use ThingSpeak for hosting IoT data including connecting your Pico to the Internet. Beginning MicroPython with the Raspberry Pi Pico allows you to build up your skills to more advanced IoT projects and Cloud systems! You will: Build valuable programming skills with MicroPython Explore the Raspberry Pi Pico and similar boards Develop your own electronics and IOT projects Incorporate the Grove component system with the Raspberry Pi Pico.