Record Nr. UNINA9910411927103321 Autore Wilkes Matthew **Titolo** Advanced Python Development: Using Powerful Language Features in Real-World Applications / / by Matthew Wilkes Berkeley, CA:,: Apress:,: Imprint: Apress,, 2020 Pubbl/distr/stampa **ISBN** 9781484257937 1484257936 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XXII, 605 p. 62 illus.) 005.133 Disciplina Python (Computer program language) Soggetti Open source software Computer programming Programming languages (Electronic computers) Python Open Source Programming Languages, Compilers, Interpreters Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Chapter 1: Prototyping and Environments -- Chapter 2: Testing, Checking and Linting -- Chapter 3: Packaging Scripts -- Chapter 4: From Script to Library -- Chapter 5: Alternative Interfaces -- Chapter 6: Speeding Things Up -- Chapter 7: Aggregation Process -- Chapter 8: Asynchronous Programming -- Chapter 9: Asynchronous Databases --Chapter 10: Viewing the Data -- Chapter 11: Fault Tolerance --Chapter 12: Callbacks and Data Analysis. Sommario/riassunto This book builds on basic Python tutorials to explain various Python language features that aren't routinely covered: from reusable console scripts that play double duty as micro-services by leveraging entry points, to using asyncio efficiently to collate data from a large number of sources. Along the way, it covers type-hint based linting, lowoverhead testing and other automated quality checking to demonstrate a robust real-world development process. Some powerful aspects of

Python are often documented with contrived examples that explain the feature as a standalone example only. By following the design and build

of a real-world application example from prototype to production quality you'll see not only how the various pieces of functionality work but how they integrate as part of the larger system design process. In addition, you'll benefit from the kind of useful asides and library recommendations that are a staple of conference Q&A sessions at Python conferences as well as discussions of modern Python best practice and techniques to better produce clear code that is easily maintainable. Advanced Python Development is intended for developers who can already write simple programs in Python and want to understand when it's appropriate to use new and advanced language features and to do so in a confident manner. It is especially of use to developers looking to progress to a more senior level and to very experienced developers who have thus far used older versions of Python. You will: Understand asynchronous programming Examine developing plugin architectures Work with type annotations Review testing techniques Explore packaging and dependency management.