

Advanced Python Programming

Binnur Kurt, PhD



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Course Content

- > **Module 1:** Object-Oriented Programming in Python
- > **Module 2:** Functional Programming in Python
- > **Module 3:** Unit Testing in Python using PyTest
- > **Module 4:** File Operations in Python
- > **Module 5:** Thread Programming
- > **Module 6:** Introduction to Web Architectures
- > **Module 7:** NoSQL Databases and MongoDB
- > **Module 8:** Designing and Implementing RESTful Services
- > **Module 9:** Event-Driven Architecture
- > **Module 10:** Reactive Programming
- > **Module 11:** Performance Tuning and Optimization of Python Applications

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Grading

- > Midterm 1 20%
- > Homework 4 20%
- > Project 1 20%
- > Final 1 40%

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Background

- > **1995**, B.Sc., ITU Computer Engineering
- > **1997**, M.Sc., ITU Computer Engineering
- > **2007**, Ph.D., ITU Computer Engineering
- > **1995-2003**, RA, *ITU Computer Engineering Dept.*
- > **2004-2008**, Lecturer, ITU Computer Engineering Dept.
- > **2008-2017**, Consultant & Trainer, Ω *Omega* Ω
- > **2018-to date**, Founder & CEO, DEEP**CLOUD**LABS
<https://www.deepcloudlabs.com>
- > **2022-to date**, Director of Big Data Training & Research Center
- > **2022-to date**, Assistant Prof., AI Engineering Dept.



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Areas of Interest

- > Java Desktop and Enterprise Technologies
- > Spring Framework: Spring Data, Spring MVC, Spring Boot
- > MySQL, MySQL Cluster
- > Programming Languages: C++, Java, JavaScript, Python
- > Oracle Fusion Middleware Technologies: SOA, BPM, OSB
- > Big Data and Machine Learning
- > Algorithmic Trading & High-frequency Trading
- > Crypto-Currency & Block-chain
- > Digital Image & Video Analysis and Processing
- > Real-Time Computer Vision Systems

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Trainings Offered



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My Certifications



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