

# AMS SHORT COURSE: A BEGINNER'S COURSE TO USING PYTHON IN CLIMATE AND METEOROLOGY

7-11 JANUARY 2018

AUSTIN CONVENTION CENTER

AUSTIN, TX

## ORGANIZER & INSTRUCTOR

Johnny Lin, University of Washington Bothell, Bothell, WA, and North Park University, Chicago, IL

## PROGRAM (ROOM 18B)

### SAT 6 JANUARY

8:30 A.M. ARRIVAL AND INTRODUCTIONS

8:45 A.M. PROGRAMMING ENVIRONMENT SETUP AND TROUBLESHOOTING

9:00 A.M. INTRODUCTION TO PYTHON: WHAT IS IT AND WHY PYTHON?

9:30 A.M. USING THE PYTHON INTERPRETER AND INTERACTIVE DEVELOPMENT ENVIRONMENT (IDE)

10:00 A.M. COFFEE BREAK

10:30 A.M. BASIC DATA AND CONTROL STRUCTURES

12:00 P.M. LUNCH BREAK

1:30 P.M. BASIC DATA AND CONTROL STRUCTURES (CONTINUED)

2:30 P.M. ARRAY OPERATIONS

3:00 P.M. COFFEE BREAK

3:30 P.M. ARRAY OPERATIONS (CONTINUED)

5:15 P.M. ASSIGN OPTIONAL HOMEWORK: PUTTING TOGETHER A BASIC DATA ANALYSIS ROUTINE

5:30 P.M. SHORT COURSE ADJOURNS FOR THE DAY

### SUN 7 JANUARY

7:30 A.M. ARRIVAL AND DISCUSSION OF OPTIONAL HOMEWORK: PUTTING TOGETHER A BASIC DATA ANALYSIS ROUTINE

8:45 A.M. FILE INPUT AND OUTPUT

10:00 A.M. COFFEE BREAK

10:30 A.M. AN INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING USING PYTHON

12:00 P.M. LUNCH BREAK

1:30 P.M. VISUALIZATION: BASIC LINE AND CONTOUR PLOTS

3:45 P.M. SHORT COURSE ADJOURNS