Contents

| Preface <mark>vii</mark> Acknowledgments <mark>ix</mark> | |
|---|------------|
| Part 1: Using, making, and sharing maps Chapter 1: The ArcGIS platform 3 Chapter 2: Map design 43 Chapter 3: Map outputs for GIS projects 75 | |
| Part 2: Working with spatial data 111 Chapter 4: File geodatabases 113 Chapter 5: Spatial data 147 Chapter 6: Geoprocessing 177 Chapter 7: Digitizing 209 Chapter 8: Geocoding 239 | |
| Part 3: Applying advanced GIS technologies 257 Chapter 9: Spatial analysis 259 Chapter 10: Raster GIS 293 Chapter 11: 3D GIS 325 | |
| Part 4: Managing operational systems with GIS 369 Chapter 12: Operations management with GIS: Graffiti Mapping System Chapter 13: Operations management with GIS: Graffiti Removal System | 371 401 |
| Data source credits 431 | |