Here are 7 steps for learning data mining and data science:

1. Languages: Learn R, Python, and SQL
2. Tools: Learn how to use data mining and visualization tools
3. Textbooks: Read introductory textbooks to understand the fundamentals
4. Education: watch webinars, take courses, and consider a certificate or a degree in data science
5. Data: Check available data resources and find something there
6. Competitions: Participate in data mining competitions
7. Interact with other data scientists, via social networks, groups, and meetings

Source:
http://www.kdnuggets.com/2013/10/7-steps-learning-data-mining-data-science.html