It’s very difficult to give a guideline on speaking in computer science since in this dynamic discipline, in many cases, maybe “no guideline” is the guideline. However, it’s still possible to summarize some features and make some (maybe useful) suggestions for students’ reference.

Your audience might be scholars, students, IT industry employees, or general public who are interested. Therefore not only should your presentation have technical “meat” to impress the experts in the specific area of computer science that your topic addresses, it also needs to be delivered in a way that CS major working in other areas of computer science or none CS major with certain science and technology background can understand.

Comparing to other disciplines, computer science is closer to other natural scientific disciplines than to human sciences. But it’s also quite different than most traditional sciences and technologies. It’s a dynamically changing discipline consisting of many different but related areas. Unlike in physics or mathematics that many people work on a same problem over many years, projects in computer science are usually much smaller and timely. But there are too many concerns, problems, or projects in computer science! That requires that a presentation tells a relatively independent and complete story, rather than just a piece of progress in a big work as in other sciences. Therefore, even in a short presentation, the motivation, background, related work, current solutions, your contribution (if a research presentation), impact, future concerns or the impact to industry and society might be included.

Furthermore, in addition to the story telling, your talk still needs to be clear, organized, rigorous, and coherent as in other sciences. Figures and formulas are necessary in many cases. Audio / video demos are also appropriate in presenting some topics. As many among the audience are hi-tech fans, skillfully using slide making software and digital devices can attract more attention and result in a better impression.