**Common language errors**

1. Run-on sentences. A run-on sentence is a sentence that is hard to understand because of extreme length. The length cutoff for run-on is hard to define. If you have one sentence with many conjunctions, such as "and" "also" "which" and "however", you are probably getting into that category. The sentence could still be technically correct, but clarity could be greatly increased by breaking your sentence into multiple sentences and clearly defining the subject and verb of each of your ideas. Refer to this [page](https://en.wikipedia.org/wiki/Sentence_clause_structure#Run-on_sentences) for examples and remedies.
2. Articles
   1. The definite article is “the” and the indefinite article is “a/an”. Their correct use requires experience and is tricky for non-native English speakers. Refer to [this site](https://owl.purdue.edu/owl/general_writing/grammar/using_articles.html) for guidance.
3. Nouns
   1. The word “data” is always plural. Therefore, “the data is streamed from the robot to the UI” should instead be “the data are streamed from the robot to the UI”.
   2. “Software” can also be referred to as “code”. Neither should be referred to in the plural (as “softwares” or “codes”), even if you’re talking about multiple programs. If you want to talk about multiple programs, use “programs”, or say “pieces of software/code” or “examples of software/code”, or something similar.
4. Verbs and participles
   1. The past tense of the verb “lead” is “led”, as in “I led the team to victory”.
   2. The word “comprise” can be used two ways: “the assembly is comprised of two parts” or “the assembly comprises two parts”. It is not correct to say “the assembly comprises of two parts”.
   3. The participles in the following example sentences (“enabling” and “leading”) must be preceded by a comma (highlighted in yellow). To determine if this is required, see if the participle can be replaced with “which [present or past tense of the verb]”. If so, a comma is required before it.
      1. “This significantly improved the communication performance, enabling the user to see real-time video feed of the robot’s operations.” Here, “enabling” can be replaced with “which enabled”.
      2. “Many times the robot’s actual heading and the robot’s belief heading are way off, leading to completely wrong localization.” Here, “leading” can be replaced with “which led”.
5. Verb-based nouns vs. verbal phrases
   1. “Setup” vs. “set up”. The word “setup” is a verb-based noun and refers to an arrangement. It is not a verb, so “The first thing we did was to setup our system” is incorrect and should instead be “The first thing we did was to set up our system”.
   2. “Login” vs. “log in”. You may *have* a computer login, but when you use it, you don’t “login” to the computer; instead, you “log in” to the computer.
   3. “Takeoff” vs. “take off”. A flying object is able to “take off”, but might wait for commands from the tower before (the noun) “takeoff” is permitted.
6. Adjectives
   1. There is a difference between “a few” and “few”. In short, “a few” is a synonym for “several”, whereas “few” highlights the fact that the number of whatever is being discussed is small. In many cases, failure to observe this distinction can practically reverse the meaning of the sentence. For example, “A few additional low-range sensors may be used” means there are several options for low-range sensors, whereas “Few additional low-range sensors may be used” implies that it will be difficult to find a low-range sensor which may be used.
   2. The word “straightforward” is a single word. It is not written “straight forward”, with a space separating its two parts.
7. Pronouns
   1. Pronouns should have clear antecedents. For example, "Neil slipped and smacked his face with the Dremel. It was severely damaged." Was the Dremel or Neil’s face damaged? [This link](https://writeforbusiness.com/etips/avoiding-unclear-pronouns) provides guidance.
   2. The words “none” and “each” are singular. Therefore, it’s incorrect to say “none of the voltage regulators have enough amperage”, but correct to say “none of the voltage regulators has enough amperage”. Similarly, “each of the team members have an assigned task” should instead be “each of the team members has an assigned task”.
8. Conjunctive adverbs (however, whereas, besides)
   1. The word “however” is easy to use incorrectly.
      1. The basic use of “however” is to contrast with what went before. For example: “We thought it would work. However, it did not.” Note that a comma is required after “however” in this usage.
      2. If you want to combine the two sentences in the above example into one sentence, it should read “We thought it would work; however, it did not.” Note that the way to connect these two sentences is with a semicolon, not a comma!
      3. If you want to combine the two sentences in a less complicated way, use “but” instead of “however”: “We thought it would work, but it did not.” Note that this involves less punctuation: a comma instead of a semicolon and no comma after “but”. Use “but” instead of “however” whenever possible, but do not start a sentence with “but”.
      4. “However” can occur within a sentence without a semicolon, but only if its function is not to join two sentences. Example: “We accepted the challenge, however, and rebuilt the device from scratch.” In such examples, the “however” can be moved to the beginning of the sentence without changing the meaning.
      5. As an exercise, here is a sentence from an ILR that needs to be corrected: “Our stepper motor was problematic however we could not find the root cause.”
   2. A sentence using “whereas” always has two clauses. For example, “Water is wet, whereas fire is hot” or “Whereas fire is hot, water is wet.” The following is a (single-clause) sentence fragment and is therefore incorrect: “Whereas in Task 4 we needed continuous readings from the force and temperature sensors and a one-time input method for the potentiometer.”
   3. Don’t use “besides” if you really mean “in addition”. Starting a sentence with “Besides, …” with this intended meaning sounds instead like you are trying to add to some self-justificatory remark that you have just made, as in the following: “I couldn’t come to the party. Besides, you invited me too late.”
9. Conjunctions
   1. The phrase “as well as” is not a simple substitute or synonym for “and”. [This site](https://thegrammargeekblog.wordpress.com/2020/07/20/as-well-as-vs-and/) has a good brief discussion. If you use “both”, don’t use “as well” with it: it should be “both X and Y” instead of “both X as well as Y”.
   2. The conjunctions “since” and “although” are not followed by a comma! Note the following examples:
      1. Incorrect: “Since, I couldn’t get the Raspberry Pi to work, I used the Beaglebone.”
      2. Correct: “Since I couldn’t get the Raspberry Pi to work, I used the Beaglebone.”
      3. Incorrect: “Although, the sensor had a small range, it was adequate.”
      4. Correct: “Although the sensor had a small range, it was adequate.”
10. Punctuation
    1. Use of hyphens. Strunk & White say in their *The Elements of Style*: “When two or more words are combined to form a compound adjective [or verb – my addition], a hyphen is usually required.” The exception is when the first word is an adverb ending in –ly. Several examples from past ILRs are: “time consuming effort” should be “time-consuming effort”, “low level hardware” should be “low-level hardware”, “friction based coupling” should be “friction-based coupling”, “8 inch dowel” should be “8-inch dowel”, and “real time control” should be “real-time control”. Compound verbs also require hyphens. Common examples from past ILRs are “fine-tune”, “laser-cut”, and “3D-print”. [This website](https://ascensionediting.com/2010/11/24/hyphens/) has a good brief discussion with examples.
11. Abbreviations
    1. The Latin abbreviation “i.e.” stands for “id est”, meaning “that is”. As such, it is preceded and followed by commas. Therefore, “The communications are broadband i.e. they cover a wide range of frequencies” should instead be “The communications are broadband, i.e., they cover a wide range of frequencies”.