

# Using L<sup>A</sup>T<sub>E</sub>X

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## Helpful Hints

- L<sup>A</sup>T<sub>E</sub>X may not like spaces in filenames. For example, `Agron 183.tex` is bad, but `Agron_183.tex` is good. Stick to just letters and numbers and underscores (`_`).
- If you download a template or example file more than once, each download will be given a new file name, and this new file name may have spaces in it or other bad characters. Learn how to change the filename on your computer, or change the filename after uploading the file to Overleaf.
- You must click on the name of your L<sup>A</sup>T<sub>E</sub>X file to highlight it in order for it to show up in the editor, and for you to “Recompile” it to create a `.pdf` file. See Figure 1.
- Figure files must be uploaded to Overleaf just like your L<sup>A</sup>T<sub>E</sub>X file. See Figure 1.
- Click on “Recompile” after you’ve made a change to your L<sup>A</sup>T<sub>E</sub>X file and want to see what the new `.pdf` looks like. See Figure 1. Be sure to “Recompile” before you download your `.pdf` file to make sure you have the latest version!

## References

- A “reference” means using the `\label{}` and `\ref{}` commands to, for example, allow L<sup>A</sup>T<sub>E</sub>X to automatically adjust the number of a figure or table. See Figure 2. (I just used the `\ref{}` command!) Look in the corresponding `.tex` file to see that there is a `\label{}` command somewhere between `\begin{figure*}` and `\end{figure*}`. In the argument of `\label{}` there is an “identifier” and it can be anything you want it to be. The identifier in Figure 2 is “fig:exp.” Use that particular identifier in the argument of the `\ref{}` command anytime you want to reference that figure.
- Use a “sticky-space,” the `\sim` character, between “Figure” and your `\ref{}` command. This prevents the word “Figure” from being on a separate line from the appropriate number in your `.pdf` file. The sticky-space always keeps them together.

## Comments

- Text that follows a `%` is called a “comment” and does not show up in your `.pdf`. You can use comments to “document” your L<sup>A</sup>T<sub>E</sub>X file so others understand your code.

upload a file

go back to projects

Source Rich Text

bkh\_why.tex

boprie.jpg

files uploaded

```

1 % why I am an agronomist. AGRON 183.
2 % Brian Hornbuckle, August 26, 2016.
3 % Updated August 16, 2017. Updated August 15, 2018.
4
5 \documentclass[12pt]{article}
6
7 \usepackage{graphicx}
8 \usepackage{geometry}
9
10 \geometry{letterpaper,margin=1.0in}
11
12 \title{why I'm an Agronomist}
13 \author{Dr. Brian Hornbuckle}
14
15 \begin{document}
16
17 \maketitle
18
19 \section*{Early Years}
20
21 When I was growing up in Southwest Iowa,
22 I did not think about working with crops, soils, or
weather and climate.
23 My dad worked as a financial officer for Brown's Shoe
Fit.
24 My mom was a teacher.
25 However, my mom's brother was a farmer,
26 and we would often visit ``the farm'' south of

```

Why I'm an Agronomist

Dr. Brian Hornbuckle  
August 15, 2018

Early Years

When I was growing up in Southwest Iowa, I did not think about working with crops, soils or weather and climate. My dad worked as a financial officer for Brown's Shoe Fit. My mom was a teacher. However, my mom's brother was a farmer, and we would often visit "the farm" south of town. I liked math and science so I picked a major in college that had a lot of math and science. I liked electromagnetics. I enjoyed it very much, but still trying to find how I could see the type of information I was learning in a way that could benefit our understanding of the environment. During my senior year, I had a professor that I really enjoyed. After being around him for a while, I realized that I wanted to "be like him when I grew up" and become a faculty member at a college or university, teaching and doing research.

College

I liked math and science so I picked a major in college that had a lot of math and science. I liked electromagnetics. I enjoyed it very much, but still trying to find how I could see the type of information I was learning in a way that could benefit our understanding of the environment. During my senior year, I had a professor that I really enjoyed. After being around him for a while, I realized that I wanted to "be like him when I grew up" and become a faculty member at a college or university, teaching and doing research.

High School Teacher

As I got close to graduation, I knew that I wanted to go to graduate school so that I could become a professor, but I also realized that before I started I wanted to do some type of internship. I applied to several schools and ended up getting a job at Clarkdale High School and became a high school teacher. I taught chemistry and physics in Clarkdale, MS. This experience reinforced my feeling that I wanted to be a teacher, but at a higher level than high school.

Graduate School

I applied to several graduate schools during the winter of my last year of teaching at Clarkdale High School. However, I didn't know exactly what I wanted to study in graduate school.

1

Figure 1: A screenshot of Overleaf.

```

78 \begin{figure*}[t]
79 \centering
80 \noindent\includegraphics[width=\hsize]{boprie.jpg}
81 \caption{This is a picture of me with David Boprie,
82 a good friend at the University of Michigan
83 who helped make my dissertation experiment work.
84 Note my sweatshirt!}
85 \label{fig:exp}
86 \end{figure*}
87
88 For my doctoral dissertation,
89 I made remote sensing and in situ measurements
90 in a corn field in Southeastern Michigan
91 (yes, they grow a lot of corn in that part of the
state).
92 See Figure~\ref{fig:exp}.
93 When a job opened up at Iowa State,
94 I applied, but didn't get it.
95 I was disappointed,

```

Figure 1: This is a picture of me with David Boprie, a good friend at the University of Michigan who helped make my dissertation experiment work. Note my sweatshirt!

When I visited the University of Michigan, it clicked. I was visiting with a professor and told him that I liked electromagnetics (the study of electromagnetic radiation) but also wanted to do environmental research. He told me about "remote sensing" and it turned out to be exactly what I wanted to do.

For my doctoral dissertation, I made remote sensing and in situ measurements in a corn field in Southeastern Michigan (yes, they grow a lot of corn in that part of the state). See Figure 1. When a job opened up at Iowa State, I applied, but didn't get it. I was disappointed, but it was a great learning experience. After an interview at the University of Texas (I did not get that job, either), I applied to another job in the Department of Agronomy at Iowa State, and this time I was ready! I got the job (the same one I have today) and became an agronomist!

Figure 2: An example of using a label and a reference.