

Productivity Tools for CS Students

Stop copy-pasting. Start automating.

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Who Am I?

- 2nd Year CS Student
- Society President (don't @ me)
- I like making things that save time

This workshop exists because I wish someone told me this stuff in first year.

Why Are We Here?

The Problem

You're probably doing this:

1. Read something in a browser
2. Copy it
3. Paste into your IDE
4. Hope it works

That's slow. And error-prone.

The Goal

Everything in one place.

- Documentation
- Code
- Presentations
- Reports

No more tab switching. No more copy-paste errors.

Tool 1: gemini-cli

What is it?

AI assistant **in your terminal**.

gemini

It can: - Write code - Explain errors - Suggest fixes - All without leaving your IDE

First Command

```
gemini "hello, what can you do?"
```

Try it now. I'll wait.

Why This Matters

- **No browser switching** - ask while you code
- **Context awareness** - it sees your files
- **Learning** - it explains, not just gives answers

Demo: Fixing an Error

Suppose you have broken code:

```
def divide(a, b):
    return a / b

print(divide(10, 0))
```

Ask gemini:

```
gemini "why is this failing? fix it"
```

Tool 2: Quarto

What is Quarto?

Document markup language.

Think: Markdown + Superpowers.

```
# Heading  
**Bold text**  
- List item
```

But it also does: - Presentations - Websites - PDFs - Code execution

Why Quarto?

The BI tutorial you saw?

- Written in Quarto
- One source → PDF + HTML
- Code runs automatically

Your First Document

```
---
```

```
title: "My Document"
```

```
format: pdf
```

```
---
```

```
# Hello World
```

```
This is my first Quarto document.
```

Demo: Make One Now

1. Create `hello.qmd`
2. Add the content above
3. Run:

```
quarto render hello.qmd
```

You now have a PDF. Congratulations.

What Can Quarto Do?

- **Presentations** ← this one!
- **Reports** ← the BI tutorial
- **Websites** ← documentation
- **Books** ← entire books

All from plain text files.

Putting It Together

The Workflow

1. **Start in terminal** with gemini
2. **Write content** in Quarto
3. **Render** to PDF/HTML
4. **Push to git** for version control

This is how professionals work.

Example: The BI Tutorial

That document you saw at the start?

- Written in Quarto
- Generated PDF
- Looks professional
- Easy to update

You can make this.

Summary

What We Covered

1. **gemini-cli** - AI in your terminal
2. **Quarto** - Documents from plain text

Next Steps

- Practice with `gemini` - ask it anything
- Try Quarto - make a document today
- Explore the examples in this repo

The files are in `quarto_advantages/` folder.

**Go home and try something
new.**