Slide 1


Hi, My name is Scott Milich, a junior transfer / freshman in Industrial Design

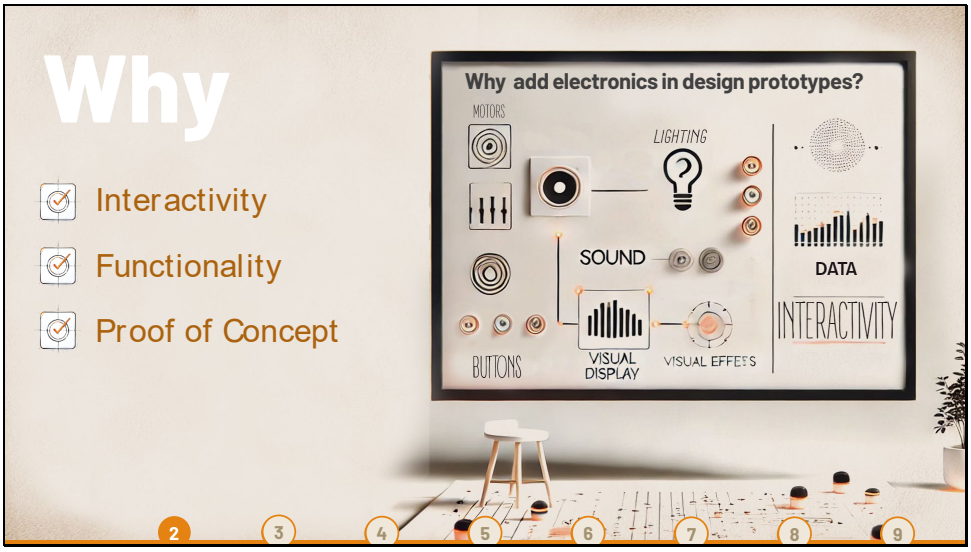
My background is in Web development and Interactive design…. I started in the early days of the internet when domain names were still free…. Over the years I have worked at a few agencies and solo with a wide variety of clients and companies. I've also had the opportunity to get involved in a lot of different things.
….. I am originally from long beach…but I have lived in New York, Hawaii
I owned a Bar in Brooklyn And once started a Taco Cart business in Thailand.

But today I want to present the idea of including electronics in prototypes

There is one specific tool that I have been using to add interactivity that is super cool.

I have my linked in and github accounts up in case anyone has any questions or wants to reach out
…

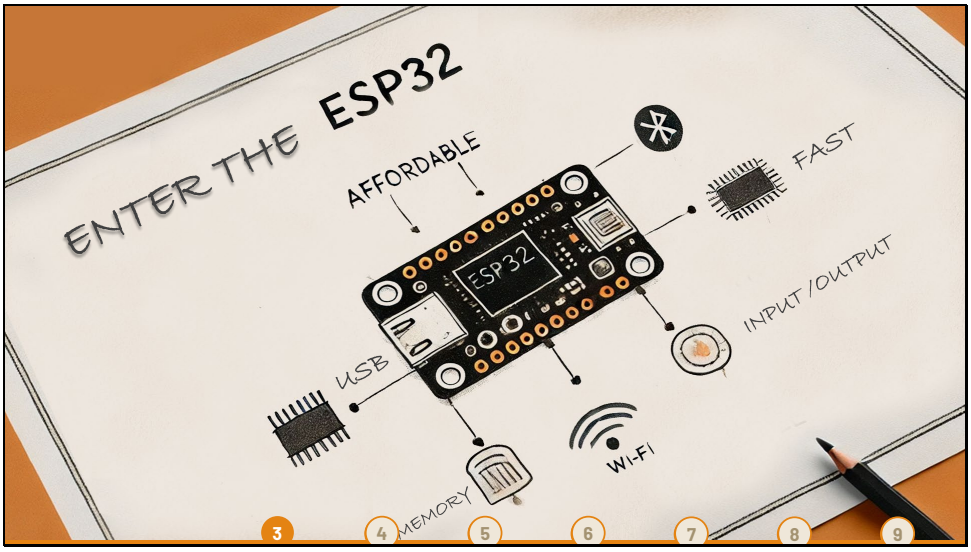
Slide 2




“So why would we want to add electronics to a prototype???
To make our projects more engaging
More fun
First… as a designers, we’re always pushing the boundaries of what’s possible in our projects.
And adding a little electronics to a prototype or product design can bring it to life

Imagine you have a design for a wearable smart bracelet, or a toy and you want to add a display or sound, lighting and movement to the design. Electronics can bring prototypes to life, allowing us to test concepts, experiment with interactions, and see how they could actually work!

Slide 3



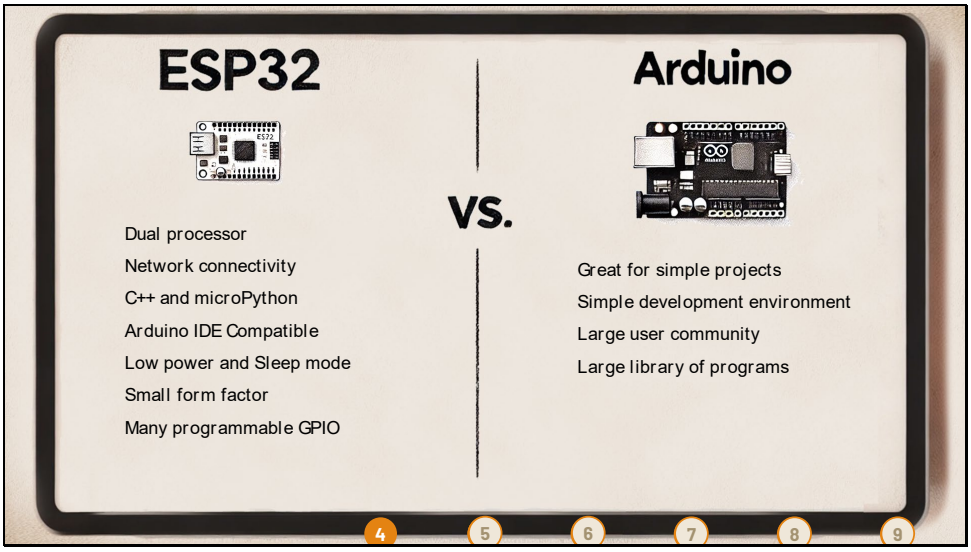

Enter the ESP32….

The esp a microcontroller like an Arduino…but with a few key differences.
Mainly … it has built-in Wi-Fi and Bluetooth, and over the air updates capability which opens up a lot of options for interactive and dynamic prototypes.

It works with the Arduino software, so if you're already familiar with Arduino, you're good to go
And if you aren't its not a super expensive way to get started its pretty cheap the core modules run about 2 bucks!

But the main part is
Having native networking make it especially good for any connected prototypes.

Slide 4




ESP32

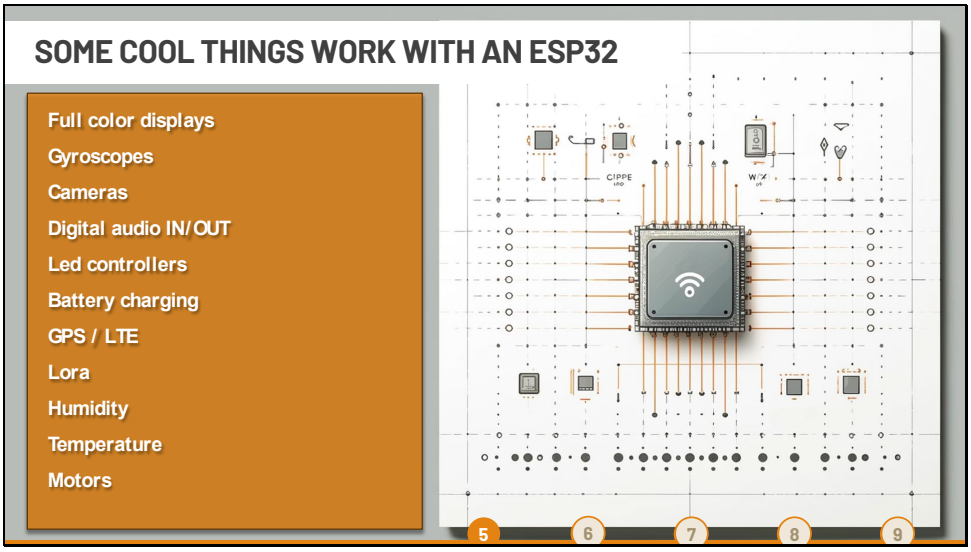
“So, how does ESP32 stack up with Arduino?
First, the ESP32 is more powerful; it’s a dual-core processor that can multiple tasks more efficiently.

As I mentioned It integrates Wi-Fi and Bluetooth. And
it is Arduino Compatible, but also have the option to use Python if you want
The ESP has a Low power and Sleep mode so it can “wake up” and send packets of data through the web or cell network
And Because it so small and compact it makes it easier to fit into sleek designs.

Finally, it has more pins and peripherals, which means you can easily connect sensors, motors, displays, or even speakers.”

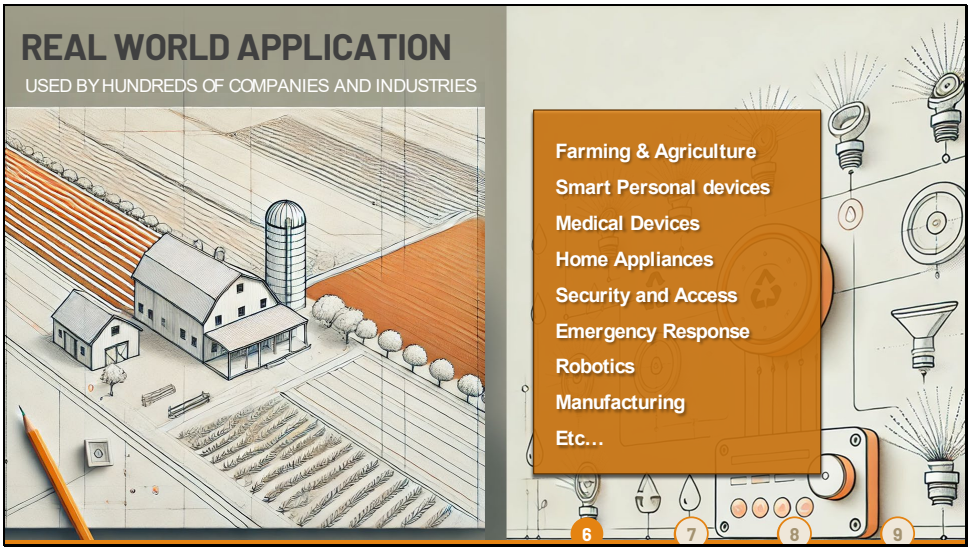
The Arduino is great! great for both simple and complex projects and you can do a lot of cool stuff with it….
Has a great user community and software library to explore.
…
But sometimes its just not the right tool for the job.
It is really the in the area of peripherals and multitasking where the ESP shines

Slide 5




Here is a list of some of the common add-ons you might find on a packaged board on amazon
*You can find:*

Slide 6

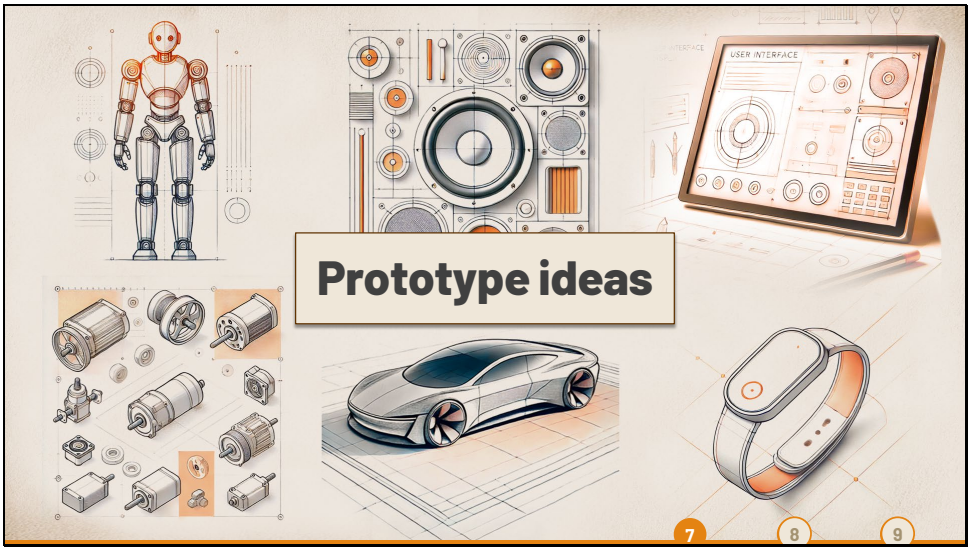



“learning how to build with ESP32 is great because it is widely used in a ton of real-world applications:

from smart home devices and automation to wearables.

And in the prototyping phase, its versatility lets you experiment and test out ideas quickly.”

Slide 7

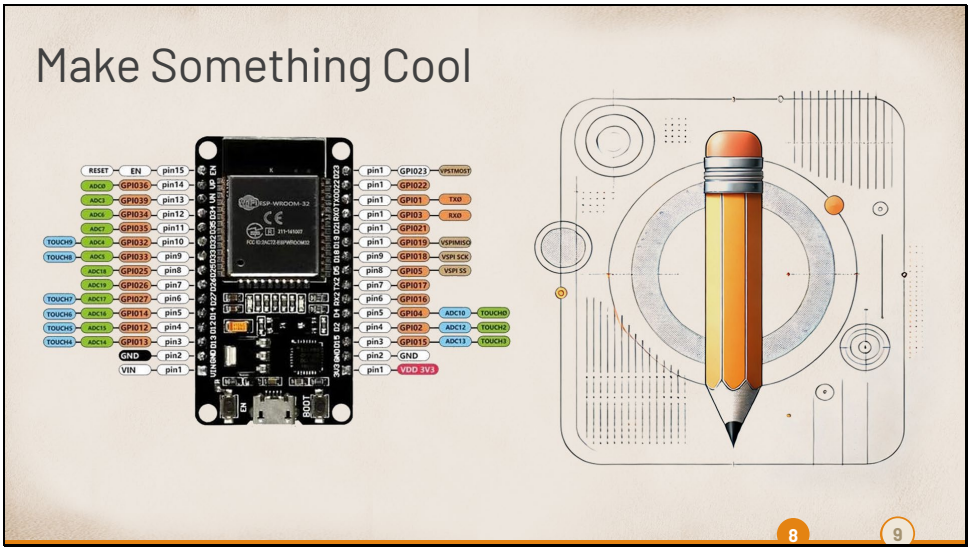



This slide is really  here to take a second to simmer any ideas for prototype designs.

Or think about how you may want to try to include some lights or sound or even motors  in a prototype you might be working on...

Does anyone have any ideas about how they could use one??
(Ask if anyone has ideas for a project and throw boards at them)

Slide 8




Ok well thanks for listening
and if you have an idea or think you might be able to use one or if you just want to experiment I brought a handful of boards to give out.