



Innovation Within 3D Design

A Glimpse into Emerging Technology

Presented by Derek Kooi, Sofia Bernal, Courtney Stokes, and Hailie Tucker



Introductions

Meet the Emerging Technology Team



Derek Kooi

Emerging Technology
Developer



Sofia Bernal

Artificial Intelligence Intern



Courtney Stokes

Web Development Intern



Hailie Tucker

Immersive Media Intern

Outline

- Think Out Loud

- How we Started

- Lessons we Learned

- Models Portfolio

- Prototyping with Copilot3D

- The Opportunity

Think Out Loud:

What is one tangible object in your workspace that you rely on that could also be 3D printed?

The Opportunity

ITS is uniquely positioned to bridge the gap between academic innovation and practical university needs; by utilizing our student intern cohort, we can deliver tangible solutions that provide high-level professional development and resume-building portfolio opportunities



Thank You Innovation Hub





How We Started

Small & Conservative



Custom Keychain



How We Started

**Small & Conservative
Practical**



Cable Organizers



How We Started

Small & Conservative
Practical
IT Oriented



Business Card Holder

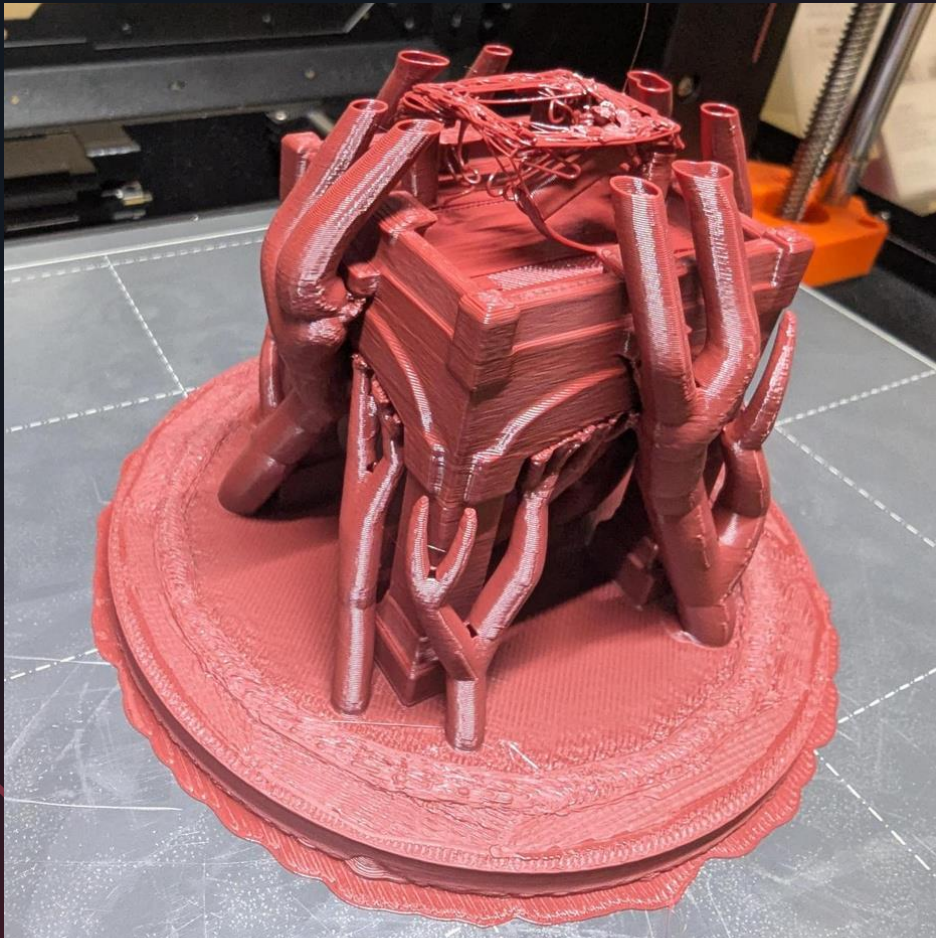


How We Started

Small & Conservative
Practical
IT Oriented
FSU Branded



FSU ITS Magnet



Learning Lessons

Supports & Filament Usage

- Knowing when and how much support material to use avoids failed prints

Multicolor Challenges

- One-color-at-a-time printing requires precise, manual filament swaps mid-print using our printer

Print Timing

- Long prints need monitoring, especially around color or filament changes

Filament Types

- Different materials behave differently with heat, flexibility, and bed adhesion

Adhesion

- A properly prepared print bed is the difference between a great print and a failure

Our Progression

As we learned, we began to incorporate more materials into our prints



Multi-Filament
Prints



Magnets



MX Keys

Creating Custom Models

FSU Branding Restrictions

- Athletic marks and seals are restricted

3D Modeling Software

- Steep learning curve for custom shapes and branded text on small models

Time to Create

- Designing from scratch takes time, we needed a more efficient approach



This led us to build a solution...

The Emerging Technology Agent



I am an IT Professional at Florida State University. I am looking for practical items I can 3D print to make my desk space organized. Give me ideas for a new desk item that I can use to hold my pens, and what logos and colors can I make this model?

3D Modeling Assistant

Condensed 3D Printable Pen Holder for FSU ITS Desk

Design Options

- Modular or minimalist pen holders with compartments for pens and small items [printables](#)
- Modern shapes or abstract designs inspired by campus architecture

FSU ITS Branding

- Use the FSU ITS lockup or department name, not the FSU wordmark or restricted marks
- Apply official FSU Garnet (#782F40) and Gold (#CEB888) for at least 70% of the design
- Avoid athletic marks, seal, or torches; use only approved ITS branding [fsu](#)

How to Proceed

- Download a pen holder STL from [Printables](#)
- Add the FSU ITS lockup or department name in garnet and gold
- Print with PLA or PETG for durability

Let me know if you want a specific model or help customizing with ITS branding!





Prototyping with Copilot 3D

An Interactive Demo

Disclaimer: Copilot Labs is not available on the FSU EDU license. DO NOT use personal or FSU proprietary information while using this tool.

Strategic Partner: Innovation Hub

RESOURCES:

- Collaborative and Hangout Workspace
- Digital Fablab
- Rubini Design Lab
- Innovation Courses
- Workshops and Events
- Faculty Support and Activities



RISE Coasters



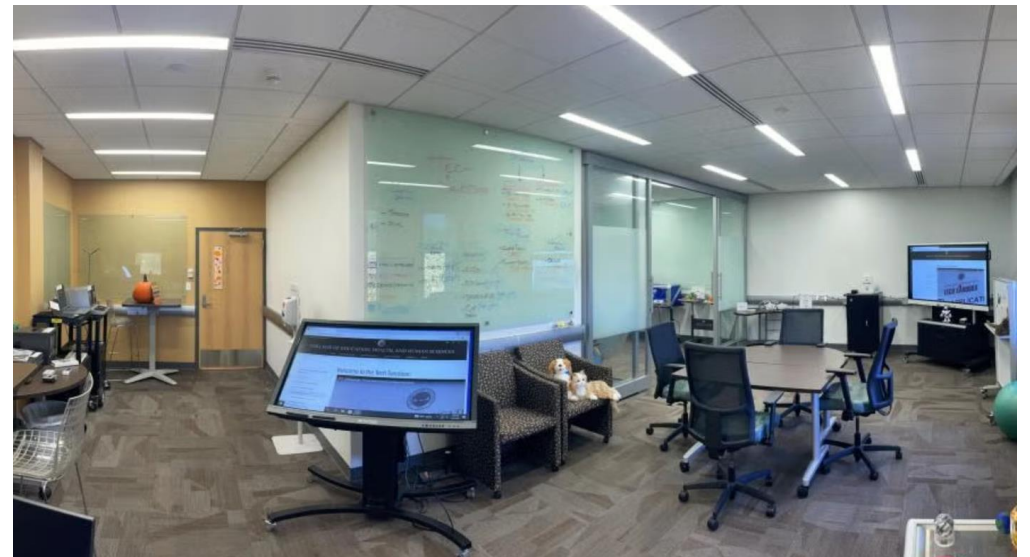


Strategic Partner:

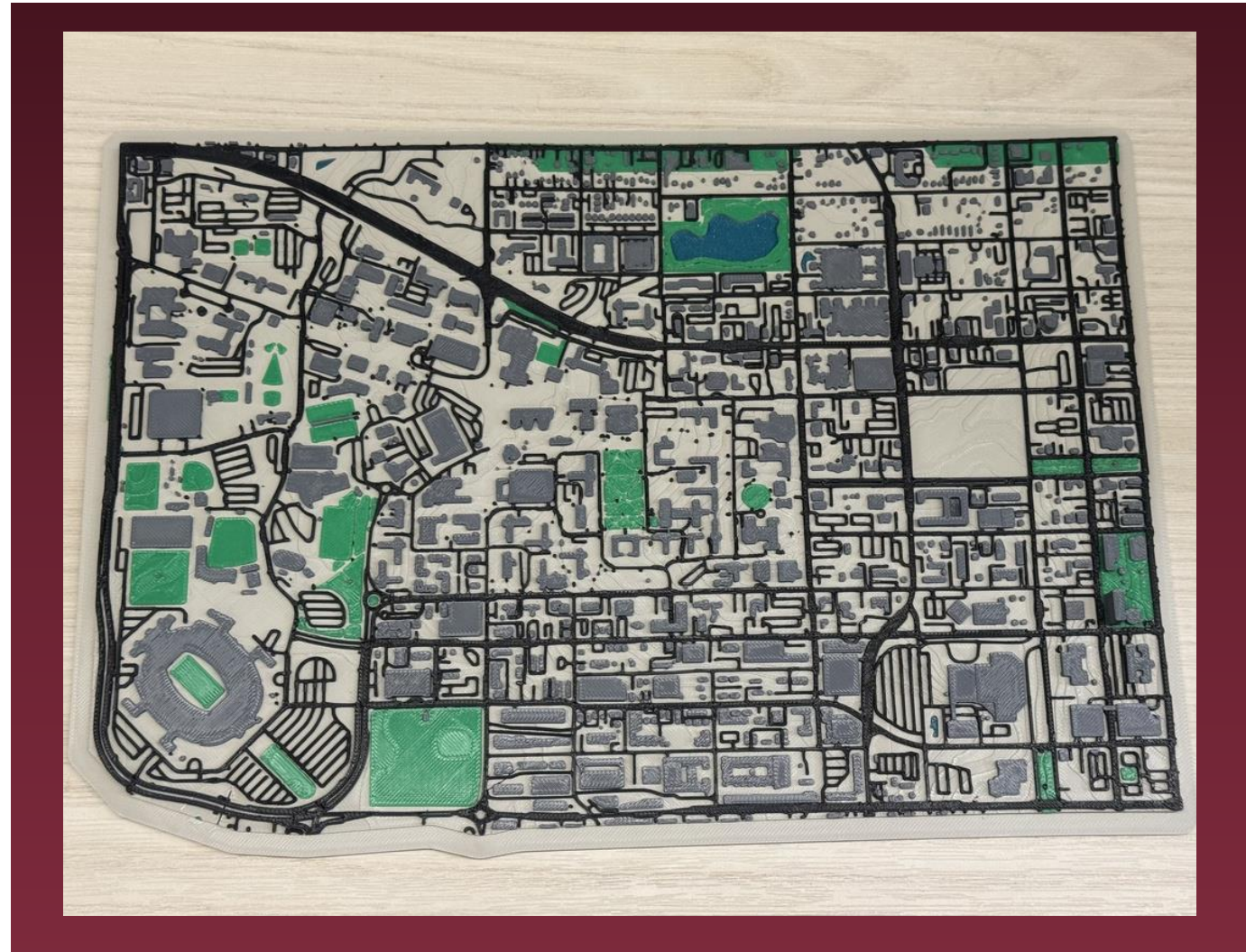
Anne's College

RESOURCES:

- Canvas site for news, resources, and support
- Events to promote hands-on learning with emerging technologies
- Bambu 3D printer for research and courses
- Contributing to the production of a 3D campus map

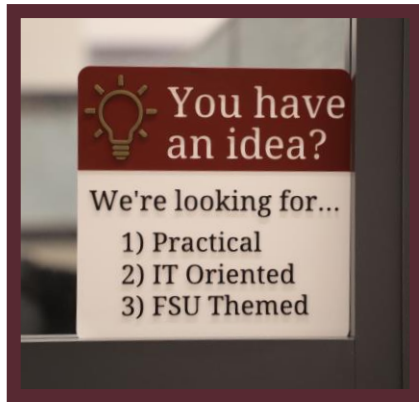


3D Campus Map

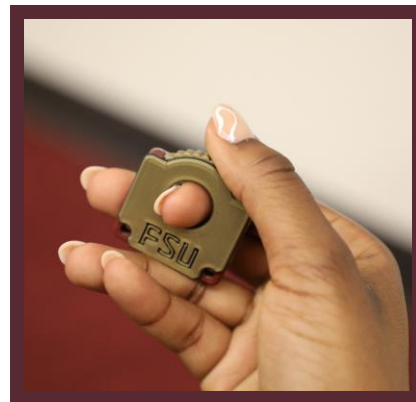


Our Prints

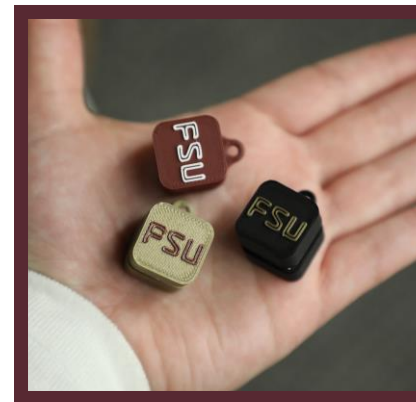
Practical, ITS Oriented, FSU Themed



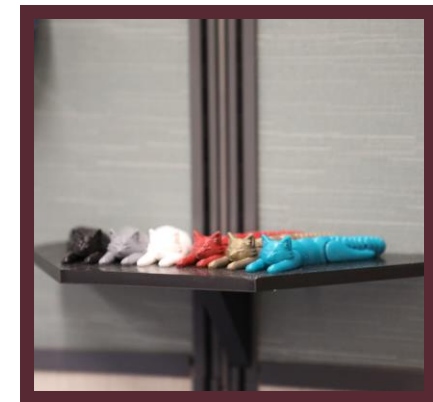
3D Print Signage



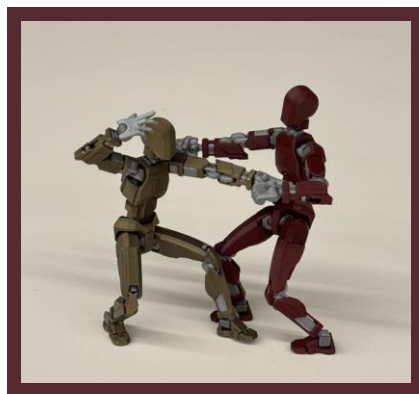
FSU Themed Scroll Fidget



FSU Themed Clicker Fidget



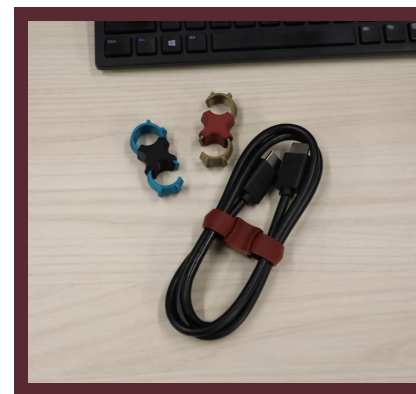
Shelf and Fidgets



Garnet and Gold Figurines



FSU ITS Signage



Cable Organizer



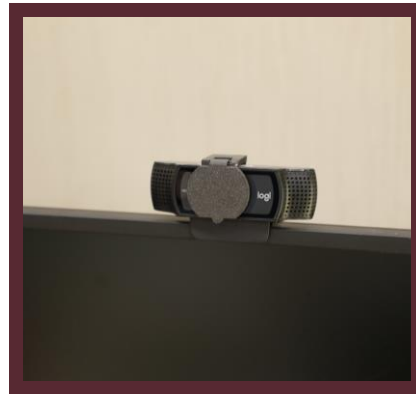
Laptop Shaped Card Holder

Our Prints

Practical, ITS Oriented, FSU Themed



FSU ITS Phone Holder



Web Cam Cover



FSU Themed Storage Box



FSU ITS Magnets



Laptop Stand



LithoFrame



Cubicle Overhang



FSU ITS Coasters

The Opportunity

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The Opportunity

Student Intern

3D Model

Portfolio

(coming soon)



Thank You!



Derek Kooi

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Sofia Bernal

Artificial Intelligence Intern
Class of 2026



Courtney Stokes

Web Development Intern
Class of 2029



Hailie Tucker

Immersive Media Intern
Class of 2027