UNDERGRADUATE HONORS THESIS DEFENSE

Building a Mobile Device that Leverages the Power of a Desktop Computer

BY:

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DATE: Friday, April 8, 2022
TIME: 4:00pm – 5:00pm
LOCATION: Lantana Hall room 121, 5885 S Twining, Mesa, AZ 85212
VIDEO LINK: https://asu.zoom.us/my/dylanlathrum

ABSTRACT:

With the recent focus of attention towards remote work and mobile computing, the possibility of taking a powerful workstation wherever needed is enticing. However, even emerging laptops today struggle to compete with desktops in terms of cost, maintenance, and future upgrades. The price point of a powerful laptop is considerably higher compared to an equally powerful desktop computer, and most laptops are manufactured in a way that makes upgrading parts of the machine difficult or impossible, forcing a complete purchase in the event of failure or a component needing an upgrade.

In the case where someone already owns a desktop computer and must be mobile, instead of needing to purchase a second device at full price, it may be possible to develop a low-cost computer that has just enough power to connect to the existing desktop and run all processing there, using the mobile device only as a user interface.

Examining Committee:

Thesis Director: Dr. Robert Heinrichs
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