

# CHANGEMAKER **BOILER CHANGEMAKER**

**The Boiler Changemaker Award recognizes:**

## RALPH RIVERA

Design and innovation are hallmarks of Purdue's Polytechnic culture. Students enrolled in the Tech 120 (Design Thinking for Technology) course are challenged to identify a community problem to develop, prototype, and present a solution for.

Graduate student instructor Ralph Rivera realized that while students have access to manufacturing equipment and online suppliers, they cannot quickly test potential electronic systems without their own investment into prototyping resources. Further, with limited funds, and lab space reduced for COVID safety, students were reluctant to explore innovative solutions at risk of being unsuccessful.

Ralph took the initiative to design a solution of his own that he proudly calls the "proto-closet". He identified commonly used, and easy to start with prototyping supplies such as microcontrollers, sensors, soldering equipment, and android devices for app development, among a variety of other tools and supplies.



He sought funding to purchase materials so students without previous design experience can visualize achievable solutions and experiment with the technology before buying it themselves to finalize their prototype.

Ralph provided documentation and support in the form of a professional development event to his peer instructors so all sections of the course would benefit. Now students can explore initial ideas in the classroom without spending their funds.

*Do you know a grad student who is making big changes? Nominate them at: [bit.ly/BCMAWARD](https://bit.ly/BCMAWARD)*