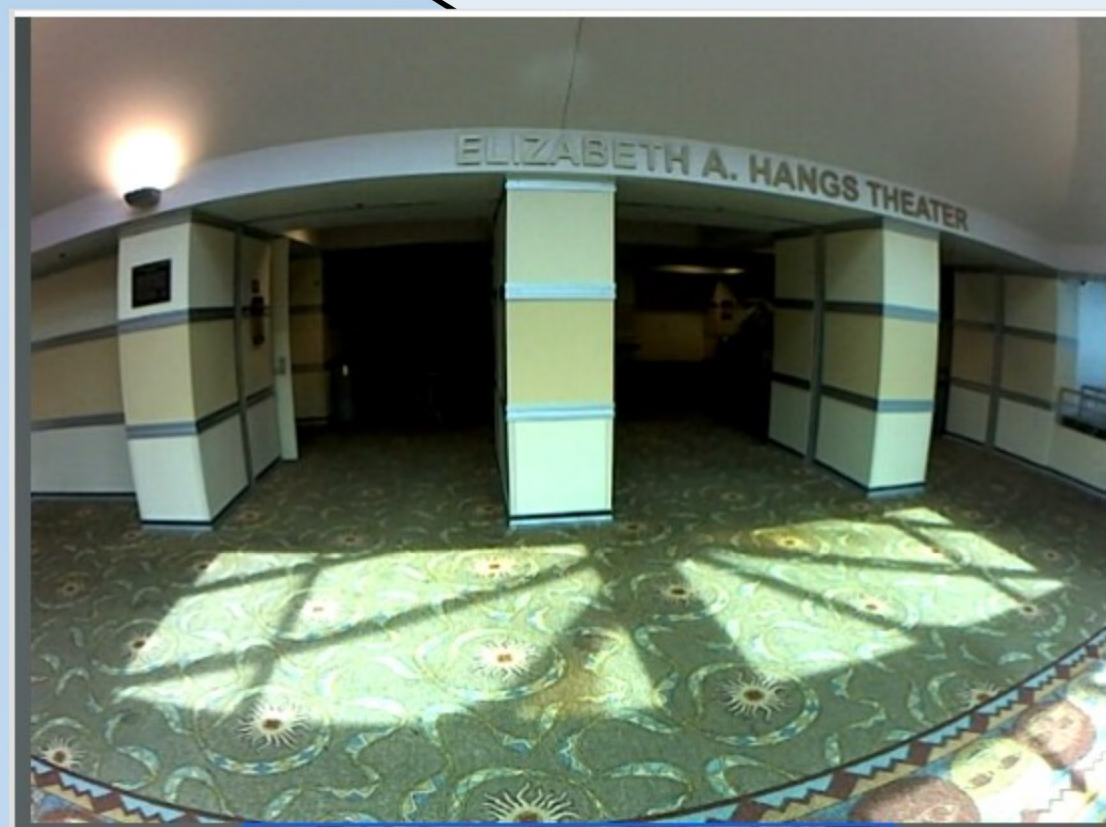


# Remote Participation to Enrich the Learning Experience:

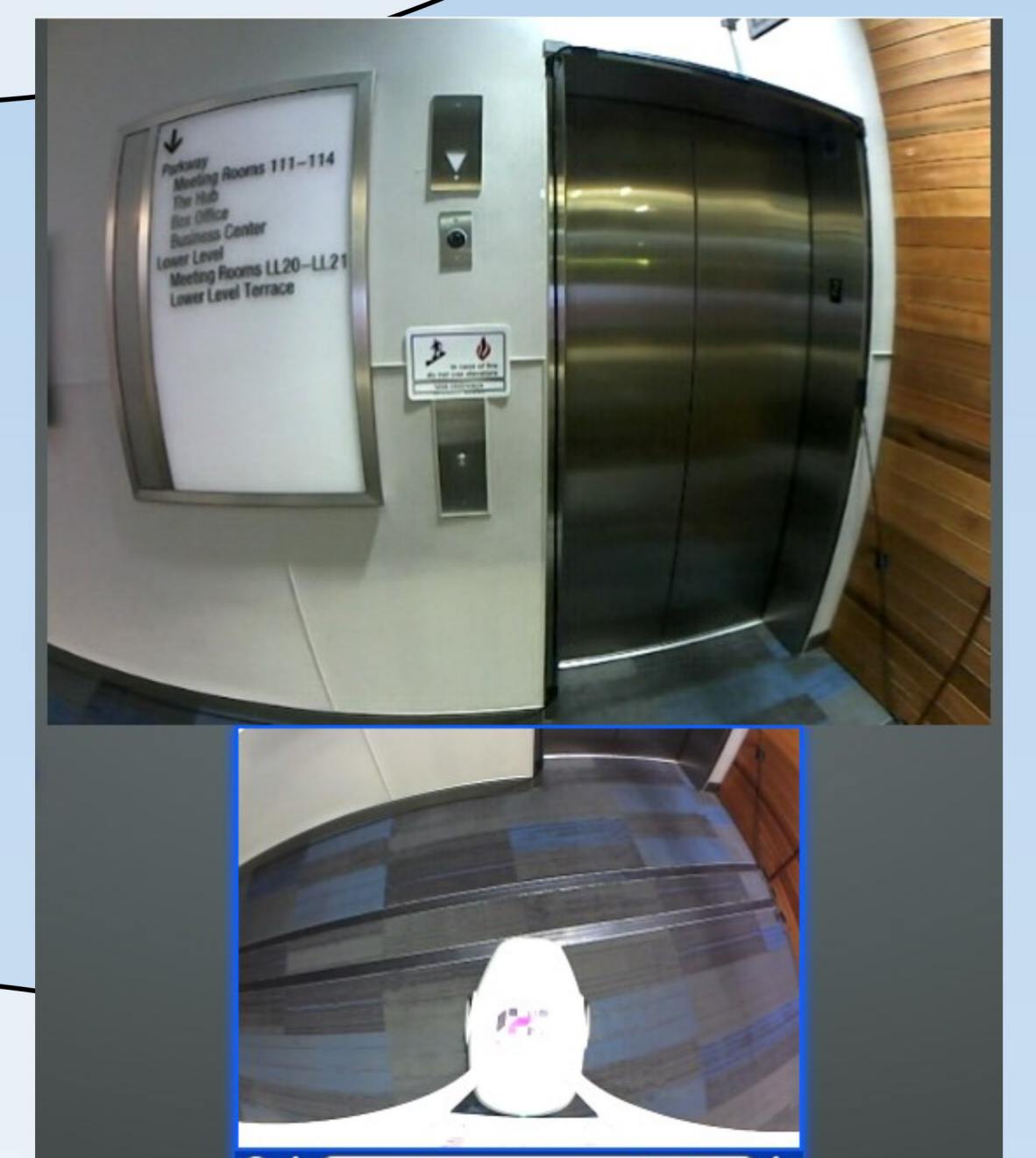
## Beaming a whole class to the other side of the planet

In May 2016, a small number of state-of-the-art mobile remote presence robots, called BEAMs (Biology, Electronics, Aesthetics and Mechanics), were made available by the organisers of the ACM CHI conference held in San Jose, California. Prof. Lueg's classes attended the conference via these 'bots' - beaming whole classes across the globe to the San Jose Convention Center!



### USER EXPERIENCE

The BEAM offered amazing user experiences both for the student 'drivers' behind the camera in Tasmania and at the conference in San Jose. Conference attendees were gracious in their considerations for the BEAM, holding doors open and giving the bot room to move. This is a consideration that would not have been offered to a person moving through the large crowd that was in attendance. **The bot was treated differently because it was a bot.**



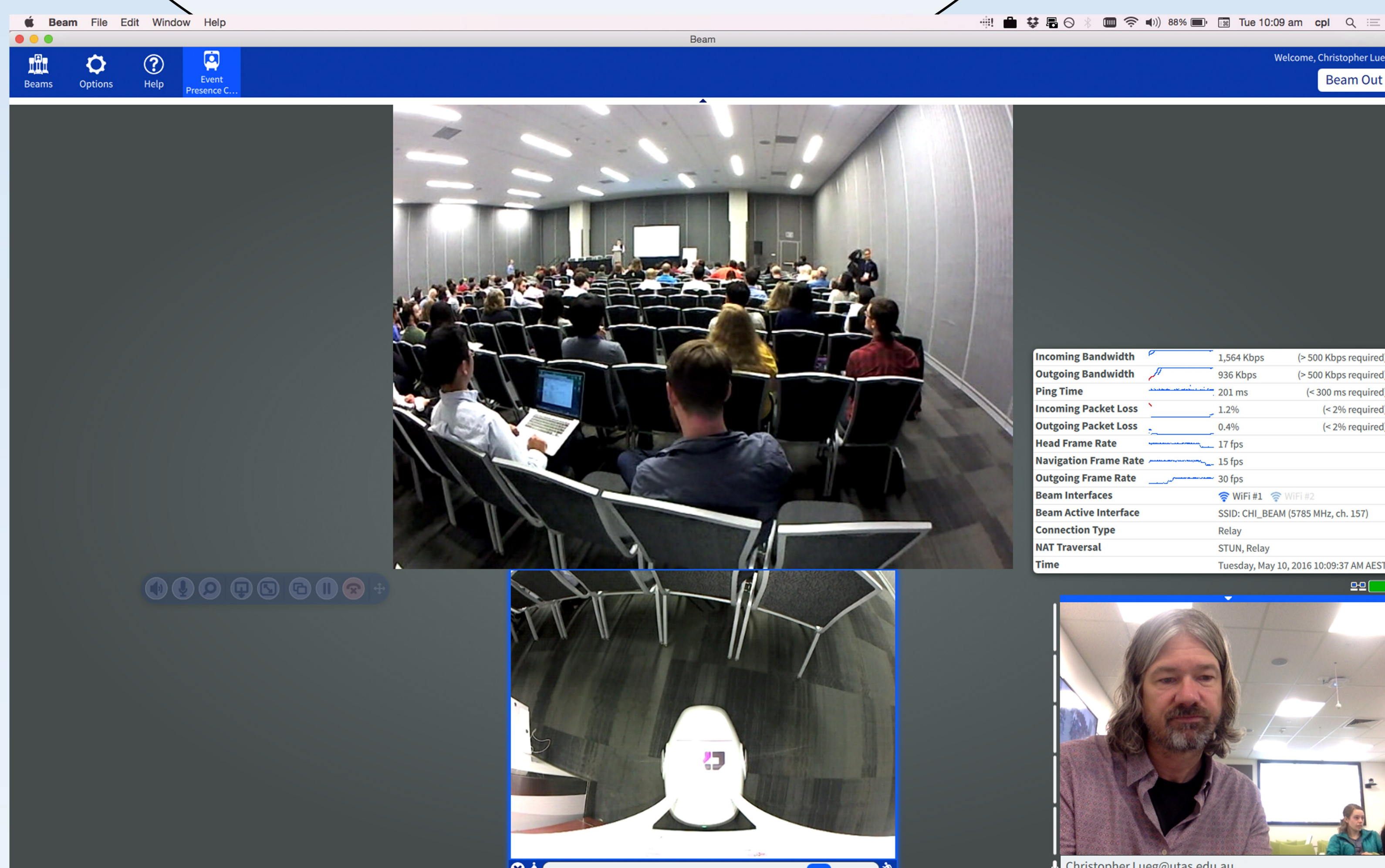
### CHALLENGES

There were some technical challenges when using the BEAM. Due to the bot's design, stairs and lifts were 'no-go' zones. An attempt was made to use the lift with some local assistance, however it resulted in the bot having to be rescued! Some WiFi deadspots caused issues with maintaining a link to the bot and some occasional network lag (even during conversation!) led to Prof. Lueg having to attempt to re-establish links with the bot.

### TEACHING OPPORTUNITIES

The experience of using the BEAM to attend a conference that would not have been possible for the students present, opens up a world of possibilities for using this technology to enable and enhance learning opportunities.

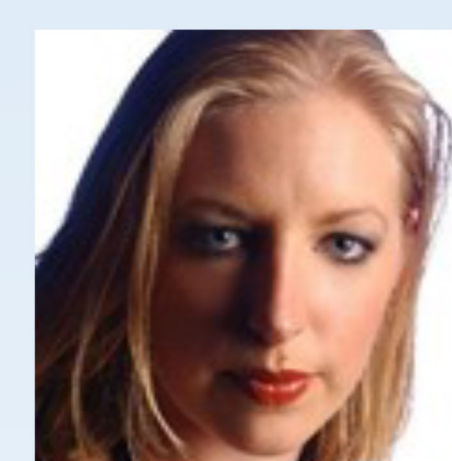
- Distance education for rural and remote students.
- International students and opportunities for international educational experiences from the classroom.
- Students physically unable to attend class can experience interactivity.



### AUTHORS



Christopher Lueg, Prof.



Meredith Castles

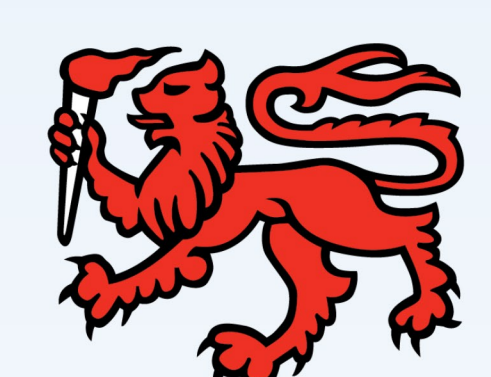


Alex Dune

Along with Sonia Rodrigo and the classes of KIT313/ KIT613 and KIT714!

### REFERENCES

- ACM SIG CHI 2016 conference May 7 – 12 in San Jose, CA, USA. Available from <https://chi2016.acm.org/>.
- Beam Remote Presence Robot. Available from <http://telepresencerobots.com/robots/suitabletechnologies-beam-pro>.
- Stevenson, S. (2014). Wish I Were There: The Beam telepresence robot lets you be in two places at once. Slate. Available from [http://www.slate.com/articles/technology/technology/2014/05/beam\\_pro\\_telepresence\\_robot\\_how\\_it\\_works\\_and\\_why\\_it\\_is\\_strangely\\_alluring.html](http://www.slate.com/articles/technology/technology/2014/05/beam_pro_telepresence_robot_how_it_works_and_why_it_is_strangely_alluring.html).



UNIVERSITY of TASMANIA

School of Engineering & ICT