





# MICHELLE ADIWANGSA

PHD STUDENT || ACADEMIC TUTOR

## CONTACT

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-  Canberra, Australia

## KEY SKILLS

- Qualitative data collection and analysis techniques + knowledge of diverse Human Computer Interaction methodologies
- Producing results in a variety of interesting, easily digestible formats
- Managing the expectation of different stakeholders
- Data analysis with Python

## EDUCATION

### Doctor of Philosophy (Human Computer Interaction)

Australian National University  
Expected completion January 2025  
Research Topic: Exergaming with Augmented Living Spaces

### Bachelor of Advanced Computing (Honours)

Australian National University - 2019  
Achievement: 6.25/7.00 GPA  
Honours Topic: Designing and Evaluating an Interface System to Combat Loneliness and Isolation Among Non-Native Speakers of English

## AWARDS

- Vice-Chancellor's HDR Travel Grants
- HDR Fee Merit Scholarship (full tuition fee and student insurance cover)
- University Research Scholarship (university stipend and benefits)
- Winner of Bushfire Grand Challenge Masterclass - Next Generation AI and Emerging Technologies Symposium, Data61, CSIRO - 2022
- ANU Summer Research Scholarship
- Best Solution Award - 2018 ANU Innovation Challenge
- People's Choice Award - 2017 ANU Innovation Challenge

## PROFILE

PhD student (Human Computer Interaction) with 6+ years of experience gathering and defining user requirements, identifying research gaps, designing and conducting studies, and developing tailored solutions. Highly familiar with Participatory Design method, Grounded Theory approach, and Thematic Analysis. Extensive experience conducting interviews, focus groups, co-design workshops, and user studies. Familiarity with physiological devices to collect and analyse data quantitatively, and technical suites for prototype development.

## RELEVANT EXPERIENCE

### PhD Research (ANU)

July 2021 - Present

*Topic: Exergaming with Augmented Living Spaces*

Published in CHI conference 2024 (rank #1 publication venue for Human Computer Interaction research) and SUI symposium 2023 (AR/VR conference)

- Employed Participatory Design method to gain insights how exergaming can be done at home in augmented reality
- Conducted 19 interviews with the general population and physiotherapists, a co-design workshop with a multidisciplinary research group investigating Multiple Sclerosis, and 6 focus groups involving photo-elicitation activity with Snapchat (for cultural probing)
- Collected and analysed 55 participants' demographic through Qualtrics survey
- Analysed data qualitatively with Thematic Analysis and presented 10 design recommendations for augmenting homes for exercising
- Devised future plan for prototype development in Unity for the Microsoft HoloLens 2 and for conducting user studies

### Academic Tutor (ANU)

2017 - Present

- Taught 300+ students for undergraduate/postgraduate Computing courses, including Human Computer Interface Design and Evaluation, Web Design and Development, Game Development, Computing Internship, and Introduction to Data Management, Analysis, and Security (in-person and online)
- Evaluated 3-4 assessments per student and provided meaningful feedback
- Reviewed the Human Computer Interaction syllabus in 2022, as head tutor

### IT Service Desk Officer (ANU)

Dec 2020 - June 2021

- Provided technical assistance and support for incoming queries through tickets & phone calls, resolving/escalating ~200 tickets & 250+ phone calls per month
- Liaised with external vendors and third parties for technical solutions
- Published client-facing and technical documentations, and trained 6 people

### Research Officer (ANU)

July 2019 - Feb 2020

*Department of Pacific Affairs - Asia-Pacific Data for Development Initiative*

- Performed library, internet, and literature searches, in addition to developing and conducting interviews with diverse stakeholders to gain insights for 2 projects:
  - Exploring and mapping opportunities for learning UX/other design disciplines and promoting gender equality in STEM in Pacific nations
  - Exploring potential solutions for combatting obesity in Pacific nations
- Designed introductory workshop to promote UX design among young girls
- Performed data entry and cleaning to visualise the Papua New Guinea National Health Data Report on PacificMap
- Prepared and disseminated relevant analysis reports to internal and external stakeholders, including external funding agencies (incl. Australian Government's Department of Foreign Affairs and Trade & The Pacific Community)

## LANGUAGES

English - Superior (PTE Academic score: 90/90)

Indonesian - Native Proficiency

Chinese - Basic Proficiency

Japanese - Basic Proficiency

## SKILLS

### Technical:

- Python (+ familiarity with machine learning and data analysis libraries), Java, Haskell, MATLAB, Ada, HTML, CSS & SCSS, Javascript
- Windows, Mac, and Linux OS
- Git

### Tools:

- Adobe Photoshop, Adobe Premiere Pro, Figma, Proto.io, Meta Sparks AR, Unity, Visual Studio Code, Android Studio, Solidworks, Microsoft Office Suite

### Licenses and Certifications:

- Working with Vulnerable People (General Registration) - Expires: 16 January 2027
- LinkedIn Customer Service Foundations
- ABRSM Grade 5 Music Theory and Grade 5 Piano

## REFERENCES

### Assoc. Prof Penny Kyburz (ANU)

Primary Supervisor (PhD)

Assoc. Director (Engagement & Impact)

✉ penny.kyburz@anu.edu.au

### Assoc. Prof Duncan Stevenson (ANU)

Supervisor (PhD & Honours)

Human-Centred Design Lead

✉ duncan.stevenson@anu.edu.au

### Prof Hanna Suominen (ANU)

Supervisor (PhD)

Assoc. Director (Neuroinformatics)

Executive member (Engineering & Computing) & Big Data Program Leader

✉ hanna.suominen@anu.edu.au

Research School of Computer Science - Human-Centred Computing Group

- Conducted 6 interviews with physiological devices to gather both qualitative and quantitative data, and analysed quantitative data through Python codes
- Analysed, extracted, and organised an online dataset containing 30,000+ misleading claims into 16 distinct topics as preparation for a project baseline
- Developed technical and research documentations for project handover

## Honours Research (ANU)

July 2018 - June 2019

Topic: *Designing and Evaluating an Interface System to Combat Loneliness and Isolation Among Non-Native Speakers of English*

- Employed a Grounded Theory Approach to gain insights from domestic and international students to address loneliness among international students
- Developed 3 sets of scenarios and personas that were utilised to conduct 11 interviews and 3 focus groups involving role-playing
- Analysed data qualitatively by coding themes, found 6 themes indicating gaps, proposed 4 different solutions, and identified the best one with participants
- Developed a mobile prototype, which includes 3 main features, with Proto.io
- Conducted user studies with 5 international students
- Published findings in New Zealand Mental Health Conference 2020 (report and poster) and as an Honours Thesis that received High Distinction

## Summer Research Scholar (ANU)

Nov 2017 - Jan 2018

- Explored suitability of physiological devices for Human Computer experiments, specifically to correlate brain signals with the effect of certain events
- Analysed 8 devices and produced a personal review for each device in a report
- Assisted with experiments to gather physiological data using suitable devices
- Visualised raw physiological data into graphs for analysis of results
- Developed technical documentation for data analysis processes

## User Research Intern (Data61, CSIRO)

Aug - Nov 2017

- Gathered existing Data61 user research and developed a wider, more comprehensive understanding of open data users
- Planned and conducted interviews with identified open data users
- Extracted findings and insights to support stakeholders working with open data
- Published findings as a report and a set of personas

## UX Design Intern (Collagis)

2017

- Year-long industry experience with ANU TechLauncher
- Worked collaboratively in a team of 6 to design an e-Commerce website
- Analysed client requirements and developed wireframes and prototypes
- Developed storyboard and posters for internal and public presentations
- Worked with HTML, SCSS, and React to develop and design web pages
- Managed detailed meeting minutes for weekly team meetings

## LEADERSHIP/VOLUNTEER EXPERIENCE

- **Experience Chair (OzCHI) (2022)**
  - Planned and organised social events for 80 conference attendees, including a fully Vegan conference dinner and a dinner crawl to the conference's Algorave gig (facilitated by Google Maps)
  - Liaised with other conference chairs to run a hybrid, environmentally friendly conference with the theme of creative connectivity
- **Tutor (Girls Programming Network) (2022)**
  - Taught basic Python programming to a class of year 4-6 girls for 1 day
- **Student Volunteer (OzCHI) (2020 & 2021)**
  - Assisted in the operation of a fully digital conference experience for 3 days, by facilitating 18 presentations across 7 sessions
  - Prepared certificates for conference award winners
- **Design Officer (ANU Indonesian Students Association) (2017 - 2018)**
  - Designed event posters, committee t-shirt, and a 20-page student guidebook for new students
  - Organised and conducted club-run events for students and the public