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# Jake Thomas Clark

## Science Communicator & Exoplanetary Scientist

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### EXPERIENCE

#### **Space Camp @ Camp Cooby, Geham** - *Content Developer and Facilitator*

JUNE 2018

I was approached by Camp Cooby to specially curate, develop and facilitate a week-long space themed holiday workshop experience for junior high school students. Over the course of a week, I facilitated the student participation and engagement within maker-styled activities, narrated around discovering aliens and their home worlds. I designed the workshop to include Skype conversations with a diverse range of Australian scientists, aiming to breakdown perceptions students may have of scientists and their careers.

#### **University of Southern Queensland, Toowoomba** - *Science Communicator, Marker*

JULY 2017 - PRESENT

I am currently employed as a science communicator for USQ's *Astronomy for Schools and Communities* program. I travel to schools within the Darling Downs region, presenting space themed talks and run day/night-time observations of the sky. I have specially designed *Build-A-Planet*, an hour long program aimed at 5-8 year old students, where students dance through the solar system and design planets out of play-doh. I have also assisted in University open days, showcasing the astronomical research being conducted at USQ, whilst running solar observations through amateur telescopes.

At USQ, I have also been employed as a marker, marking first year physics courses and evaluating students' progress based upon strict rubrics and learning outcomes.

#### **Questacon, Canberra** - *Science Communicator*

NOVEMBER 2016 - JULY 2017

My main duties included developing, presenting and facilitating hands-on 'Maker' styled STEM workshops at Questacon's makerspace. I also presented and lead development on virtual excursions in a studio setting to schools across Australia. The excursion participants included primary school and high school students, teachers, public servants and disengaged youth.

In this public sector role, I also represented Questacon in high stakeholder events including dinners and product launches, writing business cases for government held events with budgets. I've also curated written and visual content for the Questacon website and social media pages.

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### **Shell Questacon Science Circus, Canberra** - *Science Communicator*

JANUARY 2016 - NOVEMBER 2016

Working in an intimate team, I developed, refined and presented science shows, public exhibitions and workshops to various audiences such as primary and secondary school children, general public and remote indigenous communities.

In this course I liaised, interacted and engaged with various media outlets in a professional manner to help promote public exhibitions in rural and remote regions.

I was also an event manager for public exhibitions with thousands of attendees and staff. During a month-long regional school tour, I would manage the workload of a sixteen-person team roster.

### **University of Adelaide, Adelaide** - *Academic Tutor*

JANUARY 2014 - NOVEMBER 2014

During my employment, I was a practical demonstrator for first year introductory physics and astronomy courses. I prepared and presented the introductions and assisted and mentored the students in the practicals. Afterwards, my duties would include marking and evaluating students' progress and assignments based upon strict rubrics and learning outcomes.

### **The Haus Restaurant, Hahndorf** - *Food and Beverage Attendant*

JULY 2015 - JANUARY 2015

### **Rising Sun Hotel, Lobethal** - *Food and Beverage Attendant*

JANUARY 2014 - NOVEMBER 2014

### **KFC, Everard Park** - *Team Leader and Cook*

FEBRUARY 2012 - MARCH 2014

### **The London Tavern, Adelaide** - *Food and Beverage Attendant*

DECEMBER 2009 - JANUARY 2012

## **EDUCATION**

### **University of Southern Queensland, Toowoomba** - *PhD Candidate*

JULY 2017 - PRESENT

Currently discovering new worlds beyond our solar system using ground based and space based telescopes. My research involves determining the geological and atmospheric composition of these newly discovered worlds.

### **Australian National University, Canberra** - *Master of Science Communication Outreach*

JANUARY 2016 - NOVEMBER 2016

One of sixteen people awarded a scholarship and selected to study at the Australian National University to participate in the 2016 Shell Questacon Science Circus. An internationally renowned graduate programme delivering science communication outreach shows and workshops to regional and remote communities across Australia.

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## **University of Adelaide, Adelaide** - *Bachelor of Science (Honours)*

JANUARY 2014 - NOVEMBER 2014

I was awarded First Class Honours, collaborating with both University and Government departments. I analysed atmospheric data from Davis Station in Antarctica. Research was done to determine the types of Polar Stratospheric Clouds passing above the research facility to better understand the Antarctic ozone hole.

## **University of Adelaide, Adelaide** - *Bachelor of Science (Space Science & Astrophysics)*

JANUARY 2011 - NOVEMBER 2013

## **RESEARCH EXPERIENCE**

### **CSIRO, Brisbane** - *ON Prime4 Research Team*

MAY 2018 - JULY 2018

ON is the national science and technology accelerator powered by CSIRO. ON Prime is an entry level, part-time pre-accelerator that helps research teams validate their research and discover a real world application for it. During the program, teams work closely with experienced facilitators and the ON mentor network, to test paths for their IP, know-how or tech through a process of customer discovery and market validation. <http://oninnovation.com.au/en/Programs>

### **The Pan-Pacific Planet Search VII: The most eccentric planet orbiting a giant star**

R A WITTENMYER, ... , & J CLARK, 2018, THE ASTROPHYSICAL JOURNAL, [doi.org/10.3847/1538-3881/aa9894](https://doi.org/10.3847/1538-3881/aa9894)

### **The K2-HERMES Survey. I. Planet-candidate Properties from K2 Campaigns 1–3**

R A WITTENMYER, ... , J CLARK et al., 2017, THE ASTROPHYSICAL JOURNAL, [doi.org/10.3847/1538-3881/aaa3e4](https://doi.org/10.3847/1538-3881/aaa3e4)

### **The Pan-Pacific Planet Search. IV. Two Super-Jupiters in a 3:5 resonance orbiting the giant star HD 33844**

R A WITTENMYER, ... , & J CLARK, 2016, THE ASTROPHYSICAL JOURNAL, [doi.org/10.3847/0004-637X/818/1/35](https://doi.org/10.3847/0004-637X/818/1/35)

## **VOLUNTEER EXPERIENCE**

### **Skype a Scientist, Worldwide** - *Scientist*

AUGUST 2017 - PRESENT

Skype a Scientist matches scientists with classrooms around the world. I skype into high school and primary school classrooms across the world for an hour Q&A session. A session generally covers what I research and what it's like to be a scientist.

### **Scienceability, Canberra** - *Presenter*

JULY 2017

Presented and facilitated an accessibility science workshop to people with intellectual disabilities.

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### **Sciyykt!, Canberra** - *Founder and Organiser*

SEPTEMBER 2016

I ran a three week course for several disenfranchised youths at a youth engagement organisation to develop and refine their science communication skills. Each youth presented a ten minute science show in front of their peers, family and a local audience.

### **Radio Adelaide, Adelaide** - *Program Coordinator, Producer and Presenter*

JANUARY 2012 - JANUARY 2016

I was in charge of preparing and broadcasting MOSH, a two-hour weekly show containing music and news sourced from various media outlets. I networked, liaised and worked alongside with national media outlets and record labels in a professional manner.

I also organised, scheduled and conducted interviews with local, national and international artists. Then edited and broadcast the interviews on the show. Afterwards, I prepared posts on the station's website, making interviews accessible after the show. On top of this, I curated, organised and scheduled social media posts for the program.

### **University of Adelaide, Adelaide** - *University Representative*

AUGUST 2013, AUGUST 2014

I ran and communicated science exhibits and workshops with members of the public. I conversed and engaged with the public about different aspects of University life such as courses available to students, university experience and general science questions.

## **MEDIA OUTREACH**

### **Scope TV, National TV** - *Guest Science Communicator*

JULY 2017, AUGUST 2018

I have been on the Australian children science program, Scope TV, presenting to camera about 3D printing technology and my PhD research on discovering and categorising exoplanets at USQ:

<https://www.enhancetv.com.au/video/scope-3d-printing-s-host-lee/40215>

### **The Conversation** - *Content Creator and Authour*

SEPTEMBER 2017 - PRESENT

The Conversation is an independent new source, sourced from the academic and research community, delivered direct to the public. I have written three Conversation articles with a global reach of over 130,000 readers. These articles include writing about research discoveries and answering budding scientists questions on space related topics. The articles I have curated include:

<https://theconversation.com/googles-artificial-intelligence-finds-two-new-exoplanets-missed-by-human-eyes-89024>

<https://theconversation.com/weve-found-an-exo-planet-with-an-extraordinarily-eccentric-orbit-87011>

<https://theconversation.com/curious-kids-why-do-stars-twinkle-81188>

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## **The Chronicle, Toowoomba** - *Guest Science Communicator*

SEPTEMBER 2017 - PRESENT

I have been interviewed by News Corps' Darling Downs newspaper, The Chronicle, on multiple occasions, digesting astronomical news and events including:

<https://www.thechronicle.com.au/news/where-see-super-blue-blood-moon-toowoomba/3316357/>

<https://www.thechronicle.com.au/news/hundreds-gather-usq-take-part-stargazing-record/3423152/>

<https://www.thechronicle.com.au/news/region-look-night-sky-part-record-attempt/3422012/>

<https://www.thechronicle.com.au/news/where-look-once-lifetime-satellite-fly-/3226349/>

<https://www.thechronicle.com.au/news/hundreds-gather-usq-take-part-stargazing-record/3423152/>

<https://www.thechronicle.com.au/news/where-see-super-blue-blood-moon-toowoomba/3316357/>

<https://www.thechronicle.com.au/videos/stargazers-ready-record/59997/>

## **DDBFM 102.7FM, Toowoomba** - *Weekly Space Segment*

SEPTEMBER 2017 - PRESENT

DDBFM is one of Toowoomba's community radio stations. Every Friday morning, I present a weekly fifteen-minute space segment, discussing the latest news in astronomical and space research in an engaging and fun manner.

## **2SER FM, Sydney** - *Guest Science Communicator*

OCTOBER 2017 - PRESENT

One of Sydney's largest community radio stations, 2SER, has brought me on to discuss my research and breaking research happening in Australia and abroad. These stories include:

<http://2ser.com/exo-planet-found-eccentric-orbit/>

<https://2ser.com/2018-astronomy-catch/>

<https://2ser.com/protecting-the-universe/>

<http://2ser.com/geminid-meteor-shower-currently-lighting-night-sky/>

## **4ZZZ Digital, Brisbane** - *Guest Science Communicator*

JUNE 2018

Brisbane's largest community radio station 4ZZZ, hosts the weekly science show, Natural Reaction. I was brought on to discuss my PhD research throughout the two-hour long show:

<http://www.4zzzfm.org.au/program/natural-reaction/2018-05-22>

## **ABC, Local and National Radio** - *Guest Science Communicator*

SEPTEMBER 2016 - PRESENT

I've been on local ABC radio stations across the country, presenting scientific news and events. This includes my time at Questacon and at USQ, with some highlights being:

<https://www.facebook.com/ABCDarwin/videos/10154645740649873>

<https://www.facebook.com/abcsouthwestvic/videos/1818546318361697/>

<http://www.abc.net.au/radio/brisbane/programs/mornings/mornings/9253878>

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## AWARDS

**Australian Government Research Training Scholarship (\$90k)- 2017**

**Shell Questacon Science Circus Scholarship (\$40k) - 2016**

**Radio Adelaide's 'Community Connection' Award - 2014**

**University of Adelaide Summer Research Scholarship (\$1.2k) - 2013**

**President of Salisbury High's Student Representative Council - 2009**

## CERTIFICATES AND TRAINING

**1st Aid Certificate and CPR Training - 2016**

**Accessibility Workshop - 2016**

**Intensive Indigenous and Cultural Awareness Training - 2016**

**Working with Children Clearance (NT) - 2016**

**Working with Vulnerable People Card (ACT) - 2016**

**4x4 Driving Course - 2016**

**Defensive Driving Course - 2016**

**Responsible Service of Alcohol (SA) - 2011**

**Responsible Service of Gaming (SA) - 2011**

## REFERENCES

Given upon request