# PAST EXPERIENCES

# Feedback from Esri South Africa's previous winners



# Keneilwe Hlahane, 2017

Keneilwe Hlahane, an MSc student at the Department of Oceanography at the University of Cape Town, won the Esri Young Scholar Award 2017 for her research project titled "Monitoring Eutrophication in the Vaal Dam, using GIS techniques". As the winning scholar, Keneilwe presented her research at the Esri International User Conference in San Diego, California, during July 2017. Her project was displayed in the Esri Map Gallery, where a special exhibition is organised for leading students from around the world who have shown excellence in research associated with using ArcGIS technology.



### My ultimate GIS experiences from the Esri International UC The Plenary message

Attending the world's largest GIS User Conference was very exciting. This year's attendance was around 16,000 delegates from 130 countries. Esri founder and President Jack Dangermond, delivered a special message for 2017 under the theme "Applying the Science of Where". The message explained that the purpose of this GIS conference is to share, learn and grow together as GIS professionals. He concluded his talk with a quote from Leonardo da Vinci saying "Knowing is not enough, we must apply. Being willing is not enough, we must do", and do we must, for a better future.

### The Esri Young Scholars Network

Meeting the other Esri Young Scholars from 21 countries was a highlight for me, as well as connecting with many other GIS professionals in the Esri Young Professionals Network. It was an opportunity to meet GIS thought leaders and innovators, and to build my career network. It was really inspiring, and it provided me with the motivation to continue developing a career in GIS.

#### **GIS Education**

The live demo sessions had me bouncing in my seat with excitement. As an ArcGIS user, I attended the sessions about the ArcGIS online improvements. There were exciting sessions on Esri Drone2Map which have been very nicely integrated with ArcGIS Pro.

#### Conservation GIS

The session on learning about applying "The Science of Where" within Biodiversity studies was very informative. Dr Geoffrey West delivered a thought provoking keynote address about the growth cycles of biological organisms and their links to the development of urban areas.

### Closing Function San Diego's museum Balboa Park

A closing party was held at Balboa Park. We got a chance to see beautiful historical museums, enjoy great food from different cultures, and danced away to the live band performance. The closing party was inclusive of everyone who loves GIS.





# Lehlohonolo Pule Thipe, 2018

Lehlohonolo Pule Thipe, an ICT Management masters student at the University of Pretoria, won the Esri Young Scholar Award 2018 for his honours research in "Evaluating animated 3D geo-visualizations of the El Nino phenomenon for teaching at the University of Pretoria". As the winning scholar from South Africa, Lehlohonolo presented his research at the Esri International User Conference in San Diego, California in July 2018. His project was displayed in the Esri Map Gallery, where a special exhibition was prepared for young scholar award winners from 27 countries across the globe who have shown excellence in research associated with the use of Esri technology. Here he shares some details about his experiences at the 2018 Esri International User Conference.



### **Opening plenary**

Nothing was as overwhelming as the opening session. With an attendance of approximately 18 000 delegates from all over the world, it was the highlight of the conference. The conference was a huge success. President and founder of Esri, Jack Dangermond, delivered the opening address of the UC under the theme "Inspiring What's Next". His talk introduced some of the latest technology that has been developed in line with Esri's goals of learning, sharing and growing as a community of GIS professionals in an ever-changing world. Dangermond ended his talk with a Charles Darwin quote which he says is the basis of inspiring what's next in a changing environment: It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change.







#### **Presentations**

Prior to presenting my research at the UC, I was asked to talk on GIS education in South Africa at the FIG Young Surveyors Network session. Titled "Surveyors Across Borders: How Geospatial Education Differs", the session provided me with a great opportunity to tell "the world" about my country and how young people are channeled into the GIS space, the market they go into and some of the challenges they face when moving from tertiary education to the work environment.

### Networking

There were so many people from different countries that it was almost impossible not to network because of the mindset inspired by Jack Dangermond's opening address. The notion of collaboration and growing as a community of GIS professionals resonated with a lot of the people I met. Although I went to the user conference with the intention of networking, it became a highlight because I gained friends and heightened awareness to what is happening elsewhere in the world in the process.

#### **Demo sessions**

After a mind-blowing introduction to the new technologies by Jack Dangermond, the demo sessions allowed for delegates to interact with the software. Although sessions were available for all the newly introduced technology, I was particularly interested in Esri Drone2Map, ArcGIS Indoor and ArcGIS Urban. For the South African context, I felt like the application of these programs would make a big difference across several industries.

### Award ceremony and closing plenary

Special moments: Receiving my award from Jack Dangermond and featuring in the closing plenary.

#### **Demo sessions**

After a stimulating week of learning and connecting, a closing party was held at Balboa Park. It was a beautiful, warm night with wonderful food, live performances and a very special vibe. The 2018 Esri User Conference was an amazing experience. Thank you Esri South Africa for the opportunity!



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# Luke Boswell, 2019

Luke Boswell, a Business Analytics and Data Science masters student from the North West University in Potchefstroom, won the Esri Young Scholars Award 2019 for his masters research project titled "The development of a geolocation system to visualise and profile location-specific risk factors", with a focus on credit risk analytics within the telecommunications industry in South Africa. As the winning scholar from South Africa, Luke presented his research at the Esri International User Conference in San Diego, California in July 2019. His project was displayed in the Esri Map Gallery, where a special exhibition was prepared for Young Scholars Award winners from 31 countries across the globe who have shown excellence in research associated with the use of Esri technology. Here Luke shares some details about his experiences at the 2019 Esri International User Conference.



### Opening Plenary and Introduction to the UC

Possibly the most exhilarating experience for anyone with a passion for GIS and geography, the opening plenary session for the 2019 UC was absolutely mind-blowing. The theme for the UC was "The Intelligent Nervous System" and was centred around the idea that geography not only connects us all, but also provides us with a means to make better, more intelligent decisions in everything that we do. The opening plenary provided an incredible showcase of the amazing possibilities that intelligent GIS solutions can provide to help almost any aspect of human interaction. From the ground-breaking predictive AI that was showcased by NatureServe regarding biodiversity conservation, to the amazing dashboards and story maps that were created by various other organisations, the plenary session truly revealed the unlimited possibilities that Esri provides their users with, through the vast array of software and tools they offer. To end off the plenary, we were all treated to the once-in-a-lifetime opportunity of engaging with none other than Jane Goodall, E.O Wilson and Jack Dangermond. All of whom offered such incredible insight and optimism, encouraging future generations to "map for good" and to use GIS to help others in protecting the natural world.

# **Presentations and Workshop Sessions**

Throughout the course of the week, all UC attendees had the opportunity to attend as many presentations and workshops as they could fit into their days. The ability to choose which workshops to attend, the times at which they were presented and the venues in which they were held was all made so easy through the use of the Esri Events App. The app allowed me to select, mark as favourite, and read a brief summary of every presentation that was available at the UC. This was incredibly helpful in planning my own timetable so that I could attend as many sessions as possible. I personally attended sessions that focussed on spatial statistics, machine learning and AI, Python and Java Scripting in ArcGIS as well as a few of the introductory presentations for ArcGIS Pro 2.4.











### **Networking and Making Friends**

One of the most important things to remember when traveling to the UC as a Young Scholars Award winner is that you are not alone. Traveling from over 30 other countries around the world, are other incredibly intelligent young scholars who are just as nervous and excited to be attending the UC as you are. Some of whom may not be able to speak the same languages as you, some of whom have come from very different or very similar countries and cultures. This is an incredible opportunity to not only meet other Young Scholars Award winners, but also to experience the entire week with them, going on adventures together, getting lost together and sharing in all the fun of the UC and San Diego as a whole together. It is an eye-opening experience engaging with so many young people from so many different countries in such a short space of time, that it truly gives you perspective when you return back home to the comfort zone of your own country.

I personally found this aspect of the UC the most valuable and memorable after having made friends from Trinidad and Tobago, Australia, New Zealand, Germany, Canada and elsewhere. All of us still keep in touch today via WhatsApp and are eager to see each other again sometime in the near future when we next travel abroad. I would like to encourage future YSA winners, to take this opportunity to step outside their comfort zones. In my experience, life begins where your comfort zone ends, and attending UC was a great opportunity for me to go beyond mine.

### **Exploring San Diego**

Of course, there is always time for a bit of fun and exploring when you travel to a new country, and what better way to do it than with new friends or the Esri South Africa clients and staff. San Diego has so much to offer in terms of culture, entertainment and of course, an abundance of sports cars. Exploring the streets of the Gaslamp district during a lunch break or having a pint of craft beer in the evening after a long day of workshops was a great way to explore the vibrant energy that San Diego offers. Alternatively, a 20 minute trolley (train) ride to the historic Old Town suburb is a great way to experience the Mexican and Spanish culture of San Diego. The tacos and traditional Mexican beer are definitely worth the experience (maybe not the beer so much!). But all in all, exploring San Diego was truly awesome and the weather was amazing which made walking, and riding a battery-powered scooter, super fun.





### **Award Ceremony**

The award ceremony was an unexpected appreciation of the immense talent and hard work that the young scholars put into their projects and was a truly rewarding experience. Meeting Jack Dangermond was really special since he is genuinely passionate about the work that the young scholars do and is continually amazed at how the Esri software suite is being used across the world.

### The Ultimate GIS Experience

The opportunity to attend the 2019 Esri UC was perhaps the most memorable, and enjoyable experience of my life. The people that I met, the knowledge that I gained, and the adventure of traveling to a country I had never been to before to share a once-in-a-lifetime experience with so many other YSA winners cannot be adequately described with words. I have returned to South Africa with new goals, new perspectives, and renewed passion for intelligent geography. This experience was truly, the ultimate GIS experience. Thank you Esri South Africa for this incredible opportunity.

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# Mudau Mukhodeni, 2021



#### Virtual User Conference

The best thing about attending my first virtual UC 2021 was that it allowed me to create a personalised schedule depending on my geospatial interests. The nine-hour time difference allowed me to complete my school work during the day and catch the event after - I also was able to save some sessions to watch later! The event kicked off with the president of Esri Inc. Jack Dangermond's opening address under the theme "GIS – Creating a sustainable future". My takeaway from his talk was the importance of paying attention to your communities' problems and using GIS to solve them.

I was invited to a session on Thursday with all the Young Scholar Awardees from around the world to see each other's faces and say "hi". We also met with Jack who made the effort to connect and join us – this made me feel special. The best part about it was meeting and engaging with other GEOgeeks from the comfort of my home in South Africa. I also heard about the other young scholars' amazing projects and stories which was inspiring and increased my knowledge about the different ways GIS can be implemented for different needs in a community.

The discussion about the Advancement of Geographic Science by Esri was very interesting as this is my area of study and research. I am pleased to hear about the upgrades of the spatial analysis tools, spatial statistics toolbox and geostatistical analyst, the inclusion of the netCDF4 Python library, Pandas and the addition of more analytic tools. I intend on utilising these tools as well as many others for exciting future GIS projects. I really learnt a lot from this year's virtual UC and I will forever be grateful for the experience – I have extended my local geospatial network globally!

Thank you, Esri South Africa!





### Winning the YSA for South Africa

Winning the Esri Young Scholar Award for South Africa was a pivotal moment in my academic and professional journey, providing both validation and inspiration. This recognition, awarded to outstanding students who use geospatial technology to address global challenges, was a testament to my passion for geography and urban planning. My background in these fields has always been driven by a desire to understand and improve urban environments, leveraging data and technology to create more sustainable and livable cities.

### The Esri User Conference Experience

This experience has had a profound impact on my professional growth. It reinforced the importance of continuous learning and staying abreast of technological innovations in the field of urban planning. Moreover, it highlighted the significance of interdisciplinary collaboration, as the integration of GIS with other fields can lead to more comprehensive and effective solutions. I returned from the conference with a renewed sense of purpose and a clearer vision of my career path, eager to apply the knowledge and skills I gained to real-world projects in South Africa and beyond.

### Why Enter the YSA?

I strongly encourage other students to apply for the Esri Young Scholar Award. The application process itself is a valuable exercise in articulating one's research and achievements. The award offers a unique platform to showcase one's work, connect with like-minded individuals, and gain recognition in the global GIS community. For students passionate about geography, urban planning, or any field that intersects with geospatial technology, this award provides an unparalleled opportunity to advance their careers and contribute to meaningful change.





22