



IN2SCIENCE AWARDS 2017

On Wednesday 22 November 2017, the In2science Awards recognised and celebrated the outstanding achievements and outcomes in STEM engagement through the In2science Peer Mentoring Program.

Throughout 2017, In2science supported STEM education in secondary classrooms across 56 Victorian high schools, reaching over 4600 students.

The most exciting examples from across the program, including the finalists and winners of each Award category, were highlighted on the night and are captured in this document.

In2science AWARDS 2017

AWARD WINNERS



IN2SCIENCE IS BUILDING RELATIONSHIPS BETWEEN STEM MENTORS & SCHOOL STUDENTS OVER 10 WEEKS



56 PARTNER SCHOOLS
265 MENTOR PLACEMENTS
4680 STUDENTS
in 2017



Hasti Zamanian
La Trobe



Reza Aliakbari
RMIT



Anna Drayton
Melb. Uni



Margaret Ngugi
Swinburne



Sarah Hegarty
Swinburne



Loan Luong-Nguyen
Westall SC



Galen Catholic
College



Jack Esho
Roxburgh College

Thank you mentors

- FOR -



SHARING Passion



Engaging STUDENTS



BUILDING Aspirations

ROLE MODEL

MENTOR AWARD FINALISTS

Awarded to a university mentor who was an outstanding role model for their student mentees

Alvaro Bernarde (Swinburne University of Technology)

Bachelor of Engineering (Electrical & Electronic) (Honours)

Mentored Year 8 Science students at Rowville Secondary College and St Joseph's College

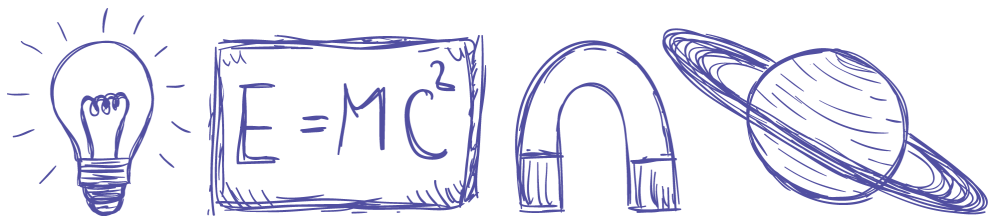
Having gained a reputation as a science rock star at his first In2science placement in 2016, it was no surprise that Al's 2017 class of student mentees were keen to absorb his insights about science in and beyond the classroom. While working with students on microscope demonstrations and helping students who found scientific concepts difficult, Al made sure to provide students with a window on how science can be applied to 'real' life. Equally, he shared his experience of study pathways after high school, especially in engineering, physics and astronomy. This combination of his personal passion for science and his encouragement of further study in STEM made Al a rewarding addition to the class.

Kate O'Hara (The University of Melbourne)

Bachelor of Science (Chemistry & Genetics)

Mentored Year 7-10 Biochemistry students at Mount Alexander College

Kate added a brightness to the biochemistry class. She was willing to get to know the students, work closely with them and use THEIR ideas to inspire them further. It was clear that students in the class enjoyed her being there. She provided them with answers yet equally provided them with challenges. Kate was a huge role model for the female students who want to pursue science. It was also amazing to see the growth in the male students in the class who began to show a greater respect for females in the field.



Hasti Zamanian (La Trobe University) - WINNER

Bachelor of Law/Bachelor of Science

Mentored Year 8-10 Chemistry students at Templestowe College and Heathmont College

Hasti came into a diverse classroom environment with students who were still settling in with each other. She went above and beyond to build positive, respectful relationships across the class. The students looked forward to her joining the practical classes each week and Hasti mastered the art of asking the students deep, probing questions about their investigations. Hasti also had some fantastic one-on-one conversations with individual students. In these conversations, Hasti shared her experiences of university life and mentored the students to start imagining what their own future education pathways could look like.

Rayan Hayek (RMIT University)

Bachelor of Engineering (Biomedical)(Honours)

Mentored Year 8 Maths students at Pascoe Vale Girls College

When Rayan walked into a class you could feel the room was instantly energised. Not only because the girls thought she was nice and cool, but because she made science and maths interesting and accessible to them. She explained complex concepts in terms they could understand. She had a great rapport with students and focused particularly on disengaged students, giving them a new interest and desire to try harder. They saw her as one of them, someone they could relate to, who was smart, had worked hard and had achieved success - a true role model.

IMPACT

MENTOR AWARD FINALISTS

Awarded to a university mentor who made an exceptionally positive impact in engaging students in science or maths

Graham Watson (Swinburne University of Technology)

Bachelor of Engineering (Civil) (Professional)

Mentored Year 8 Maths students at Heathmont College

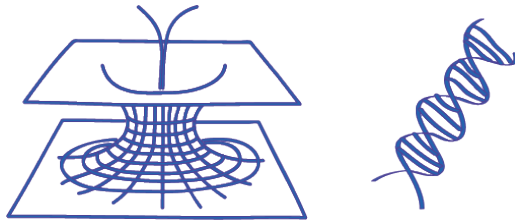
Graham has been particularly supportive of students working significantly below level in a Year 8 foundations maths class. Many of the students have emotional, behavioural and learning difficulties, to which Graham has responded with great patience, compassion and warmth. He has been keenly attentive to their needs and interests and worked closely with teacher Robyn to learn more about them and other ways he can support them. As a result of his encouragement and guidance, a female student has progressed from a highly anxious attitude to mathematics to strongly improved confidence and achievement on maths tasks.

Harry Singh (La Trobe University)

Master of IT

Mentored Year 9 Maths students at Roxburgh College

Harry built a strong rapport with the students from the first weeks of his placement, to the point where they would greet him enthusiastically at the beginning of each class. By working one on one with students who were having difficulty, he helped them go from the least engaged in the class to the most. He built upon this rapport and impact in second semester when he returned to mentor the same class.



Lachie Talbot (The University of Melbourne)

Bachelor of Science (Human Structure and Function)

Mentored Year 9 Science students at Simonds Catholic College

Lachie was fantastic with the kids. He was proactive, a great communicator and had great subject knowledge. He helped all students, doing both theory and practical work and brought a lot of enthusiasm. The students thought he was great. He never missed a class, was always on time and engaged with even the most difficult student in the room. He has offered to come back and volunteer at the school again next semester.

Reza Aliakbari (RMIT University) - WINNER

Bachelor of Engineering (Aerospace)

Mentored Year 8/9 Science students at Brunswick Secondary College

Reza has been an outstanding mentor who made a significant mark on his class of mentees. He was enthusiastic, knowledgeable, flexible, supportive, and always organised. Thanks to his solid efforts to connect with them, he developed a great rapport with students at Brunswick SC. Reza supported his host teacher in teaching content to students and facilitating student engagement in class tasks. He provided support for students in learning science theory by tutoring them during the class. He also helped to set up practical investigations so that students could spend more of their time on engaging activities. Reza spoke to students about his pathway, current studies and career interests, answering their many questions about VCE and beyond.

DEDICATION

MENTOR AWARD FINALISTS

Awarded to a university mentor who showed exceptional dedication and commitment to the In2science program

Anna Drayton (The University of Melbourne) - WINNER

Bachelor of Science (Neuroscience)

Mentored Year 9 Science & Robotics Club students at Hume Central Secondary College

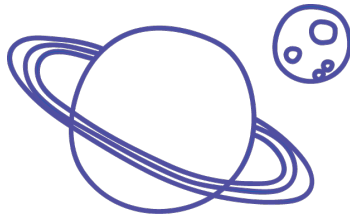
Not only did Anna mentor a year 9 science class in Semester 1 & 2, she also helped in a lunchtime robotics club despite unfamiliarity with coding and robotics. Anna truly extended herself and went out of her comfort zone. She honestly let students know when she didn't have the answers and worked with them to develop their best study skills. She talked about maths as being a type of brain training which may not seem relevant now but has impact and importance for students' futures. Hume Central was not close to home for Anna. In fact, it was in an area of Melbourne that she had never visited before, however she enthusiastically established relationships with students throughout 2017.

Hashala Fernando (Swinburne University of Technology)

Bachelor of Science (Biochemistry/Chemistry)

Mentored Year 8-10 students at Galen Catholic College, Maffra Secondary College, Wodonga Middle Years College and Wellington Secondary College

Hashala has shown commendable dedication to the In2science program, having completed four consecutive placements across both in-class and online delivery modes. Across these placements, Hashala has been very generous in sharing her university-level understanding of biochemistry with her student mentees, providing a valuable extension opportunity for students in regional schools. In a recent eMentoring session, Hashala made effective use of an online sketch tool to explain the structure of hydrocarbons to a student who was excited by the prospect of pursuing biomedical science at university.



Kevin Newman (La Trobe University)

Bachelor of Science; Master of Teaching

Mentored Year 8/9 Science students at Thornbury High School

Kevin demonstrated his dedication to mentoring by attending additional sessions at the end of Semester 1, by arranging to continue his placement in Semester 2, and by making additional visits before and after the Semester 2 placement period. Kevin established an excellent working relationship with the host teacher, provided a lot of extra support to the students and brought a strong passion for science to his mentoring, frequently drawing real-world connections to class topics.

Yianna Phaedonos (RMIT University)

Bachelor of Computer Science

Mentored Year 8 Science students at Copperfield College

Yianna was enthusiastic, creative and committed in her approach to mentoring her year 8 science class at Copperfield College. Yianna's unique experience and expertise in computer science was an invaluable addition to the classroom. Working collaboratively with host teacher Karen Martin, Yianna led Virtual Reality expeditions looking at light and the respiratory system, complementing the in-class learning objectives set out by Karen. Yianna was committed to assisting students wherever she could, including by extending her placement period, by working one-on-one to improve scientific literacy and report writing skills, and by extending students with challenging content.

ABOVE & BEYOND

MENTOR AWARD FINALISTS

Awarded to a university mentor who showed exceptional initiative in engaging students in science or maths

Chloe Lilkendey (RMIT University)

Bachelor of Science (Mathematics)

Mentored Year 10 Maths students at Glenroy College

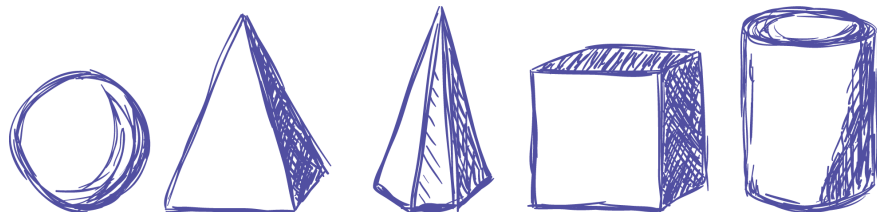
Chloe is a passionate mathematics mentor, who more than anything wanted to share her passion and demonstrate to students that maths is relevant across all careers and professions. During her placement Chloe came to the realisation that many of the students were more interested in vocational careers. In response to this Chloe developed a worksheet and presentation demonstrating how linear equations are imperative to 'real' world situations; for example, when running a small business (such as a mechanic shop or hairdressing salon), as it is essential to optimise costs, revenue and profitability in business.

Maddison Crombie (La Trobe University)

Bachelor of Science/Bachelor of Arts

Mentored Year 9 Science students at Epping Secondary College

One particularly impressive moment from Maddison's mentoring placement was when she volunteered to run a session with the class on a day the teacher was supposed to be on excursion. Maddison went to a great deal of effort to mimic soil samples from excavation sites she had worked at during her university degree. She put together a fantastic presentation about her archaeology journey so far, particularly focusing on her experiences at the 4 excavation sites. She created a prac sheet for the lesson and engaged the class in scientific discussion. The teacher was in awe of the effort Maddison was willing to go to provide an eye-opening experience for the students.



Margaret Ngugi (Swinburne University of Technology) - WINNER

Bachelor of Aviation Management/Bachelor of Business

Mentored Year 8-10 Maths/Coding students at Bayswater Secondary College and St Joseph's College

Margaret has shown exemplary initiative in being the best In2science mentor she can be. In addition to completing her third consecutive In2science placement, she has taken up countless opportunities to grow her skills and experience as a mentor. These have included a science communication roadshow with the Questacon Science Circus, participating in a 'Having Fun With Maths' workshop at ACER, and exchanging tips with new mentors at In2science training sessions. For her most recent mentor placement, Margaret was thrown into the exciting world of NAO humanoid robotics. New to the field, but modelling the can-do attitude of a STEM student, Margaret took up a collaboration with a robotics expert from The Brainary to ensure she could best help her student mentees.

Victoria Munro (The University of Melbourne)

Bachelor of Science (Chemistry)

Mentored Year 8 Science students at Footscray City College

Victoria put in additional time to present every second week on cool, interesting science and aspects of university. She tailored her presentations to reflect her personal experiences and her own journey into science. She developed warm relationships with students while challenging their original opinions about science and university. In addition to classroom mentoring, Victoria organised an excursion to The University of Melbourne for three year 8 and 9 science classes. The excursion comprised a tour of the campus, the Blood exhibition at Science Gallery, and a chemistry lab activity to supplement the Science Gallery exhibition. Victoria liaised with staff from the Science Gallery, the University and In2science to provide her mentees with a showcase of university and real-life science.

E MENTORING

MENTOR AWARD FINALISTS

Awarded to a university mentor who showed exceptional dedication to the In2science online eMentoring Program

Emily Edsell (The University of Melbourne)

Bachelor of Science (Neuroscience)

Mentored a Year 10 Science student at Maffra Secondary College

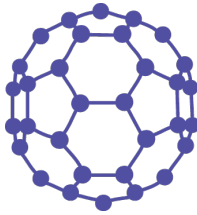
Emily has been an excellent mentor. She showed empathy and keen interest towards her student mentee, particularly for how the mentee was progressing with her learning. Emily was always friendly and put her mentee at ease. She had excellent questioning skills and - in the words of the mentee - was able to "*make things just a lot easier.*" Emily helped her mentee to understand that it is possible to live in the country and pursue tertiary studies. She shared her stories of life at university, including having to travel long distances to access her education. This went a long way to helping her mentee understand that distance should not be a factor in striving for your dreams. Emily is hard-working, dedicated and a great role model for young women in science.

Mei Du (The University of Melbourne)

Bachelor of Science (Genetics)

Mentored a Year 10 Science student at Galen Catholic College

It was Mei's openness and honesty that struck her mentee in their first online eMentoring session. Mei's passion for genetics was contagious and gave the mentee new passion for genetics/biology studies in the future, broadening her understanding of uni life and her own expectations. Mei instantly engaged her student mentee by opening up to her own experience of feeling disappointment when she did not get into medicine. She shared how she dealt with this setback and found success, contentment and pride in what she is now studying: genetics. This opened the mentee's mind to the wide range of opportunities available, many of which go beyond that one ATAR score. A weight has been lifted off the mentee's shoulders thanks to these conversations with Mei.



Sarah Hegarty (Swinburne University of Technology) - WINNER

PhD (Astronomy)

Mentored Year 10/11 Science students at Traralgon College

Sarah was specifically selected to work with her group of three students as they are passionate about astrophysics. Sarah did an outstanding job, creating a fun and friendly environment where her students felt comfortable to ask crazy questions and think outside the box. Their questions were always validated by Sarah and she would often follow up on these ideas in subsequent sessions with resources to peak their interest and generate further conversation. She was a wonderful role model for women in STEM, especially during the 3D Astro Tour visit when her students came onto campus to see her work in action.

Tara Storey (RMIT University)

Bachelor of Science (Food Technology)

Mentored Year 8/9 Science students at Merbein P-10 College and Brunswick Secondary College

Tara was very bubbly, confident, knowledgeable and punctual. She deserves to be recognised because of her AWESOMENESS as a mentor! She was just all-round fantastic with the kids. Tara was exceptionally approachable and broke the information down into easy-to-digest chunks for the younger students to grasp. She was an excellent addition to the students' science experience.

MENTOR SUPPORT

TEACHER AWARD FINALISTS

Awarded to a teacher that provided an exceptionally supportive mentoring environment

Eli Goldbaum (St Albans Secondary College)

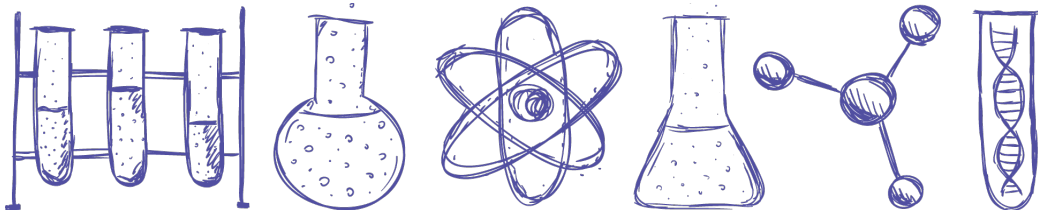
Eli has worked with In2science mentors each semester throughout the current round of the In2science program. Eli is a positive advocate of In2science and of the role of relationships in student learning. This is reflected not only by his presence in the classroom, but equally through his support of In2science mentors. Eli truly integrates mentors into the class and works with them to develop different ways to encourage and help specific students. In the words of recent mentor, Jason: "*[Eli] made me realise how important it is to celebrate a student's achievements no matter how big or small, in order to encourage them to challenge themselves.*"

Loan Luong-Nguyen (Westall Secondary College) - WINNER

Loan has been an enthusiastic supporter of In2science mentors at Westall SC. As the school's link teacher, Loan is proactive in making mentors feel welcome, valued and celebrated at the school. She has encouraged colleagues to take advantage of the program, leading to 7 In2science mentor placements at Westall in 2017 (including 5 female mentors). Equally, she has sought to enhance the placement experience by facilitating a workshop for In2science partner teachers in Melbourne's south-east. Last but not least, Loan has been a fantastic host teacher, drawing on the expertise of several In2science mentors this year in her science classes and STEM elective, whilst completing a Grad Cert in STEM Education as part of the VicSTEM Catalyst Program.

Maree Timms (Galen Catholic College)

Maree Timms is passionate about her students' engagement with STEM, often giving up her own time to ensure they have access to learning opportunities such as In2science. Maree is an outstanding communicator and has the ability to bring people together with ease. She is extremely responsive as a link teacher and regularly keeps her mentors in the loop via Moodle discussion boards. Maree also opened the door for In2science to participate in the Digital Harvest conference in Wangaratta, extending the reach of the program to even more regional students. Recently, Maree organised for two of her students to speak about their eMentoring experience at a school assembly.



Simone Rolfe (Emmanuel College)

Simone has been an outstanding link teacher with the eMentoring program. Simone provided invaluable feedback about the program during the Teacher Feedback session at the end of Semester 1 and was the first teacher to introduce Project Based Learning with eMentoring. Simone hosted 5 eMentors in Semester 2 who worked with her Year 9 students on CSIRO CREST projects and provided detailed progress updates along the way. Simone ensured that her eMentors had every opportunity to pass on their knowledge and experiences even in a project-focused environment.

Tamara Brennan (Brunswick Secondary College)

Tamara proactively coached her In2science mentor Reza on how to best integrate himself into the class and how to communicate with each student depending on their needs. She gave clear and straightforward plans for each lesson, which gave Reza the capacity to ensure students understood the science context and content for each class task. Tamara and Reza worked together on developing practical components for the class, which helped Reza develop his teamwork skills. As Reza says, *"Tamara's assistance really solidified the meaning of the activity for students. It was great to see her perseverance for a successful outcome in her students, regardless of the challenges."*

Wendy Gooley (Templestowe College)

Wendy was an incredibly warm and approachable host teacher for her In2science mentor Hasti. She made sure to chat with Hasti before each visit so that Hasti knew what she would be doing in the class, how she could best help out, and which groups would be her main area of focus. These included students that weren't interested in science apart from the practical components. Together, Wendy and Hasti worked to inspire enthusiasm in the students and to get them thinking about how chemistry could be an important subject to continue throughout VCE.

ENGAGEMENT

SCHOOL AWARD FINALISTS

Awarded to a school community that demonstrated exceptional engagement with the In2science program

Galen Catholic College - WINNER

Galen Catholic College hosted the largest number of eMentors in 2017, creating a direct impact on participating students, teachers and the wider school community. This resulted in several nominations throughout in the 2017 Awards. Galen was very engaged with the In2science team in general, actively responding to In2science tweets, events, newsletters and Facebook posts. They have consistently spread the word about the In2science program to other teachers and invited the In2science eMentoring team to a regional digital education conference. This nomination recognises all involved in the program and their ability to increase wider community awareness through the power of STEM mentoring.

Mount Alexander College

Mount Alexander College has hosted 21 mentors since 2015, across diverse classes such as 'Medicine and Disease', 'Practical Maths', 'Forensic Science' and 'Robotics – Beyond the Terminator'. Mentors have supported students - each of which has an individual learning plan - with their study projects by guiding them through the scientific process to answer questions they find personally relevant. Science coordinator Nicole Dobson particularly encouraged mentors into classrooms where there was going to be a change of teacher mid-term, to provide consistency and stability for the students. Mentors have felt a genuinely valued part of the Mount Alexander community.

Rowville Secondary College

Rowville Secondary College joined the In2science program in 2016. Since then, it has hosted 8 In2science mentors as part of its science and mathematics enrichment programs. This has involved mentors being integrated into special 'project' classes and invited to participate in school science fairs and join class excursions. Along with host teachers Andrew Lim, Jay Hoefft and Justin Ordon, link teacher Melissa Fraser has enthusiastically embraced the opportunities that mentors bring to the school. Melissa makes an exemplary effort to welcome mentors to the school and to profile their contributions. Indeed, Rowville SC has recently opened its doors for the new In2science 'mentor experience' video, which will premiere after the 2017 Awards.



Roxburgh College

Through the standout initiative of its teachers - Brendan Russell, Frank Szydowski, Nameer Hana, and Shameem Hashmi - Roxburgh College has amplified its involvement in the In2science program over 2017. This has involved both highly engaged teachers from previous years and new teachers embracing the program, leading to 7 mentor placements in 2017 alone. Indicative of the school's drive to ensure its students benefit as much as possible from the mentors' presence is a recent class, in which the host teacher encouraged her mentor to transform a brief presentation into a period-long Q&A about life at uni and STEM study pathways.

Werribee Secondary College

Werribee Secondary College have been a stalwart of the In2science program, providing ongoing support and placement opportunities for 19 mentors since 2014. David Lu and Astra Kirsanovs have consistently hosted mentors in their science and maths classes throughout this time, making an ongoing commitment to the value of peer mentoring for their students. This commitment has been best demonstrated through the numerous Werribee alumni who have returned to volunteer as mentors at their old school through the In2science program.

OUTSTANDING MENTEE STUDENT AWARD FINALISTS

Awarded to a student that demonstrated exceptional engagement with their In2science mentor and studies

Jack Esho - WINNER

Roxburgh College

Having an In2science mentor helped to engage students like Jack, who had become disengaged by maths or simply needed some extra support. The mentor helped Jack to see the logic behind maths, making the work more stimulating for him, which led to an improvement in Jack's maths results. Thanks to the mentor, Jack has developed important maths skills, such as problem solving.

Aydin Nergiz

Roxburgh College

Gabe Watson

Galen Catholic College

Georgia Bailey

Camperdown College

Imogen Quilty

Galen Catholic College

Jake Aronleigh

Distance Education Centre Victoria

Madalynn Baumanis

Galen Catholic College



THANK YOU TO OUR PARTNER SCHOOLS



Altona P-9 College
Antonine College
Ararat College
Auburn High School
Bayside P-12 College
Bayswater Secondary College
Brighton Secondary College
Brunswick Secondary College
Bundoora Secondary College
Camperdown College
Caroline Chisholm Catholic College
Cobram Secondary College
Collingwood College
Copperfield College
Dandenong High School
Distance Education Centre Victoria
Dromana College
Eaglehawk Secondary College
Emmanuel College Warrnambool
Epping Secondary College
Essendon East Keilor District College
Euroa Secondary College
Footscray City College
Forest Hill College
Galen Catholic College
Glen Eira College
Glenroy Secondary College
Heathmont College
Horsham College
Hume Central Secondary College
John Fawcner Secondary College

Lalor North Secondary College
Lalor Secondary College
Maffra Secondary College
Maribyrnong Secondary College
Mercy College
Merbein P-10 College
Mill Park Secondary College
Mount Alexander 7-12 College
Pascoe Vale Girls Secondary College
Reservoir High School
Robinvale College
Rosehill Secondary College
Rowville Secondary College
Roxburgh College
Simonds Catholic College
St Albans Secondary College
St Joseph's College Ferntree Gully
Templestowe College
The Grange P-12 College
The Lakes South Morang P-9 School
Thomastown Secondary College
Thornbury High School
Traralgon College
Wantirna College
Wellington Secondary College
Werribee Secondary College
Westall Secondary College
William Ruthven Secondary College
Wodonga Middle Years College
Wodonga Senior Secondary College

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