

## AKCSE E-Newsletter

[ ISSUE 17 ] October 15, 2023



캐나다한인과학기술자협회

The Association of Korean-Canadian Scientists and Engineers

## President's Message

안녕하세요? 2023 한-캐 과학기술대회 (CKC2023)에서 많은 회원님들을 만나게 었그제 같은데 벌써 3개월이 흘렀습니다. 올해는 CKC가 동부에서 열려 서부쪽에 있는 YGP 멤버들은 상대적으로 적게 참석하였습니다. 그래서 저희 협회에서는 과총특별사업 경력개발 워크샵을 서부 캐나다에서 가을에 개최하기로 했고 지난 10월 7일 캘거리에서 60여명의 YGP 회원들과 16명의 정회원들이 참석한 가운데 성황리에 워크샵을 마쳤습니다. 성공적인 행사를 위해 수고해주신 많은 연사님들과 적극적으로 참여해주신 서부 캐나다쪽 지부 (Victoria, Mainland BC, Southern Alberta, Central Alberta, Saskatchewan Chapters) 회원님들께 감사드립니다.

한편 2024년 6월 16일부터 20일까지 Banff Centre for Arts and Creativity에서 개최되는 CKC2024 준비를 위해 지난 9월 29일 협회 회장단 회의가 있었고, 내년 CKC의 주제는 "Accelerate International Collaboration by Unlocking the Power of Science and Technology"로 정했습니다. CKC2024 홈페이지 첫 장이 열렸으니 내년 대회 참석을 위해 관심있으신 분들은 참조하시기 바랍니다. <https://akcse.ca/ckc2024/index.php>



## 2023 AKCSE Career Development Workshop

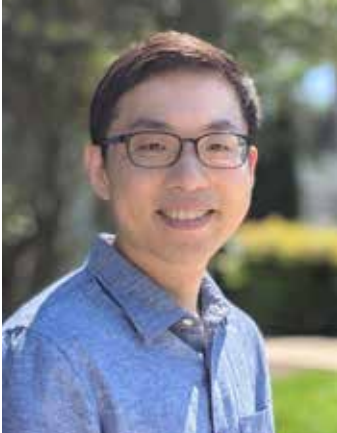
지난 10월 7일 토요일 캘거리에서 경력개발 및 캐나다 연구/산업 동향에 대해 논의하는 Career Development Workshop 행사를 개최하였다. 60여명의 YGPN 회원과 16명의 정회원이 참여하여 성공리에 행사를 마무리 하였다. 다양한 분야에서 종사하고 있는, 다른 경력단계에 회원들이 모여 경험을 공유하고, 학생들을 격려하고 조언하는 알찬 시간이 되었다. 곧 시작되는 멘토링 프로그램 관련 회원들이 경력개발과 관련하여 가장 관심있는 부분이 어디에 있는지도 논의할 수 있는 기회가 되었다. 향후 이와 같은 행사를 통해 많은 회원들이 만나 서로 격려하고 조언할 수 있는 자리가 마련되기를 기대한다.



## Highlights from 2023 AKCSE Career Development Workshop



## AKCSE Seminar Series



2023년 9월 21일에 네번째 AKCSE 세미나가 온라인 상에서 열렸습니다. 이번 세미나에서는 University of Toronto 이승재 교수님께서 "Occupant-Centric and Grid-Interactive Smart Buildings"라는 흥미로운 주제의 발표로 자리를 빛내 주셨습니다.

### Occupant-Centric and Grid-Interactive Smart Buildings

Seungjae Lee, Ph.D., LEED AP

Assistant Professor

Department of Civil & Mineral Engineering, University of Toronto

**Abstract:** Buildings account for more than 30% of the total end-use energy consumption and 50% of the electricity usage globally, while people spend 90% of their lifetimes in buildings. Ensuring comfortable and healthy indoor environments is a critical function of building systems. At the same time, the increasing threat of climate change is driving increasing demand for significant improvements in building energy performance. In this context, the application of AI and IoT technologies into building energy system operations has the potential to (i) save more than 30% of building energy consumption; (ii) manage or curtail 20% of commercial buildings' electricity peak load to enable efficient and reliable grid services; and (iii) provide individual occupants with customized indoor environments that enhance their health, comfort, and productivity. This presentation will introduce various research efforts to realize occupant-centric and grid-interactive smart buildings by applying modern technologies. Also, it will discuss current challenges in realizing occupant-centric and grid-interactive smart buildings and future research directions.

**Bio:** Dr. Seungjae Lee is an Assistant Professor in the Department of Civil and Mineral Engineering at the University of Toronto, leading the Intelligent and Interactive Buildings (IIB) Laboratory since 2021. Dr. Lee's research focuses on Interactive Buildings (IIB) Laboratory since 2021. Dr. Lee's research focuses on developing reliable and scalable artificial intelligence (AI) solutions for building energy systems. Prior to joining U of T, Seungjae Lee was a postdoctoral research associate in the Grid Interactive Controls group at Oak Ridge National Laboratory (Oak Ridge, Tennessee). He received a Ph.D. (2019) in Civil Engineering from Purdue University and a B.S. (2009) and M.S. (2011) in Architectural Engineering from Yonsei University. Prior to starting his Ph.D. studies, he worked at HANMI C&E, a building HVAC commissioning and building energy audit company, for 3.5 years. E-mail: [sjae.lee@utoronto.ca](mailto:sjae.lee@utoronto.ca); website: <https://hab.civmin.utoronto.ca/people/dr-seungjae-lee/>.

## Next Speakers



**Oct 19, 2023**

Enhancing Research in Substantive Fields Through the Careful and Proper Use of Methods: A Quantitative Psychologist View

**Sunmee Kim, Ph.D.**

Department of Psychology  
University of Manitoba



**Nov 16, 2023**

Hydrogen and Fuel Cell Technologies – From Materials and Interfaces to Device Studies

**ChungHyuk Lee, Ph.D.**

Department of Chemical Engineering  
Toronto Metropolitan University



## YGPN CORNER

### YGP Post-CKC Gathering 2023

Building upon the momentum generated by CKC 2023, YGPN invited our dedicated attendees and volunteers to a virtual gathering aimed at reflecting the success of CKC and fostering reconnection. On September 8th, an assembly of attendees, organizers, and volunteers came together on the Zoom platform for the YGP Post-CKC Gathering.

This event provided YGP attendees with an excellent opportunity to unite, exchange valuable feedback regarding this year's CKC, and engage in meaningful discussions and enjoyable games. These shared experiences would pave the way for planning an even more enriching YGP program in the upcoming CKC in Banff.



### The YGP Pan-Canadian Mentorship Program has been launched!



In 2023, YGPN introduced an exciting new initiative: the Pan-Canadian Mentorship Program.

This program is designed to empower YG and YP members by fostering meaningful Mentor-Mentee relationships and helping them develop essential personal, professional, and networking skills. The program spans 10 months, offering YGP members the unique opportunity to join the extensive Canada-wide network that AKCSE has cultivated over the years.

In early September, an enthusiastic response from over 50 applicants for the program was received, and we successfully paired the Mentors and Mentees based on their interests and prospects. To officially launch the program, the Kick-Off Meeting was held on September 20, 2023, where the gathering provided an in-depth overview of the program, clarified all relevant details, and outlined the expected deliverables.



Over the coming months, Mentor-Mentee pairs will meet (in-person or online) at least once a month to engage in Monthly Mentorship Sessions, focusing on various topics related to personal, professional, and leadership development. Additionally, we've spiced things up with some fun challenges with prizes. These challenges could include but are not limited to: "Submit the Best Mentor-Mentee Selfie" and "Submit the Most Interesting Discussion on Your Mentorship Session Record".

If you have an innovative idea for the fun challenges, you are more

than welcome to pitch your idea to us!

We invite you to stay tuned for updates on the exciting offerings that the Pan-Canadian Mentorship Program holds for the YGP participants! We are truly thrilled to witness the growth of Mentor-Mentee relationships throughout these sessions and months to come.



#### As always... connect with us on social media!

LinkedIn: [www.linkedin.com/in/ygp-akcse](https://www.linkedin.com/in/ygp-akcse)

Facebook: <https://www.facebook.com/ygp.akcse>

Instagram: <https://www.instagram.com/ygp.akcse/>

Twitter: <https://twitter.com/YAkscse>

YouTube: <https://www.youtube.com/channel/UC1CcK8hgxyoKWkb3x6ccgHg>

Discord: <https://discord.gg/GPvKUb7bA3>

## Entrepreneurship: Meet Pawniverse!

Pawniverse



We're thrilled to shine a spotlight on an extraordinary venture rooted within our own AKCSE community. Meet Pawniverse, an innovative startup founded by our very own AKCSE GTLO YP Co-Chairs and executive team members. Pawniverse represents a universe where pets take the lead, redefining the way young pet owners and enthusiasts between the ages of 13-39 connect with their furry, feathered, or scaled companions. As its name suggests, Pawniverse envisions a world where pets journey to a different universe—one that revolves around them, not humans. This ground-breaking, incentive-based, gamified social media platform provides a unique space for pet lovers to create meaningful interactions, forge connections within the pet community, and enhance the joy of pet ownership. With a mission to promote a healthier lifestyle through increased physical activity, Pawniverse is transforming the pet-loving landscape, one pawprint at a time. We're immensely proud to see AKCSE members at the forefront of this exciting venture, showcasing our commitment to innovation and community-building. Join us in celebrating Pawniverse and embark on a pet-centric adventure like no other! They are currently in R&D stage. For more information or interest in Pawniverse, reach out to [pawriends@gmail.com](mailto:pawriends@gmail.com), follow Instagram [@pawniverse\\_inc](https://www.instagram.com/pawniverse_inc) or visit [www.pawniverse.framer.ai](http://www.pawniverse.framer.ai).

## Chapter Updates

가을을 맞이하여 BBQ 행사가 여러 지부에서 이루어졌습니다. Central Alberta 지부에서는 지난 9월 23일 지부 전체가 참여하는 BBQ 행사를 열어, YG, YP, 일반지부의 다양한 연령대의 회원들이 한자리에 모이는 특별한 시간을 제공하였습니다. 또한 서로 다른 지부로부터 멤버들이 한자리에 모여 상호간의 네트워킹을 강화할 수 있었습니다. 특히 젊은 회원들에게는 일반지부 회원들로부터 경력개발상담의 기회를 자연스럽게 제공할 수 있었습니다. 더 나아가 지부의 단합을 한층 향상시켜 지부의 결속과 지속적인 성장을 도모할 수 있었습니다. Southern Alberta 지부에서도 지부 소속의 교수, YG/YP 학생 회원 및 기술종사자 분 40여명이 참여한 BBQ 행사를 열어, 한인 과학기술자들 간에 네트워크를 다지는 자리를 마련하였습니다. 특히 YG회원들의 많은 참여로 내년 KCX 2024 준비에 대한 논의도 진행하였습니다.



Central Alberta 지부



Southern Alberta 지부

For story ideas, news and announcements, please contact [e-newsletter@akcse.org](mailto:e-newsletter@akcse.org)

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