



AKCSE 캐나다한인과학기술자협회

The Association of Korean-Canadian Scientists and Engineers

President's Message

안녕하세요! 코로나 팬데믹 상황이 캐나다의 많은 지역에서 호전되고 있고, 이제 많은 회원분들이 1차 백신 접종을 마쳤다는 소식을 듣고 있습니다. 제가 있는 킹스턴은 백신 보급이 늦기는 하지만, 저도 얼마 전에 1차 접종을 마쳤습니다. 가장 어려운 고비는 지나고, 이제 어려움의 끝이 보이기 시작합니다.

9월 1-4일에 할리팩스에서 열리는 CKC2021 대회는 hybrid 형식으로 진행하기로 결정하였습니다. 캐나다의 협회 회원분들은 최대한 대면으로 할리팩스 대회에 참가해 주시기를 요청드리고, 한국의 참가자들은 아직 대면 참가가 가능하지 않은 상황이므로 online으로 참가할 계획입니다. 할리팩스 시간기준으로 오후시간 동안은 협회 내부행사 및 네트워킹을 할 계획이며, 밤 시간(9 pm - 자정)에는 한국과의 행사를 실시간, online으로 진행할 계획입니다. 또한, Technical Session과 Research Showcase를 위한 call for proposal이 공지되었습니다. 올해에는 Technical Session에서 발표한 논문으로 학회논문집을 공식 발간할 계획입니다. 자세한 사항은 이메일과 CKC 홈페이지로 계속 업데이트 해 드리겠습니다. 많은 분들의 적극적인 참여를 부탁드립니다!



President Il Yong Kim

CKC2021 @ Halifax (September 1-4)

Call for Abstract!

Canada-Korea Conference on Science and Technology (CKC) is an international conference jointly organized by the Association of Korean Canadian Scientist and Engineers (AKCSE) and the Korean Federation of Science and Technology Societies (KOFST). Fostering collaborations between Canada and Korea has been the key focus of conference. CKC has brought together scientists, engineers, entrepreneurs and young students from Canada and Korea, and provided an important platform to build network, share knowledge and develop collaborative research. CKC features Technical sessions, Canada-Korea R&D collaboration programs, Research Showcase as well as Young Generation/Professional Program.



<https://akcse.ca/ckc2021/>



평등, 다양성 및 포용성

EDI 가 과학/공학을 연구하는데 왜 중요한가요?

How Diversity Makes Us Smarter - <https://www.scientificamerican.com/article/how-diversity-makes-us-smarter/>

과학적으로 연구한 결과에 따르면, 다양성은 우리를 더 똑똑하게 만든다고 합니다. 우리와는 다른 사람들과 함께 공부하고, 일하고, 협력하면 더 창의적이고 부지런해질 수 있고, 열심히 일하게 되는 동기를 부여하게 되기도 합니다.

Local Chapter 소식

Manitoba 지부 (지부장 서미영, University of Manitoba)

COVID-19으로 어려운 한 해 중에도 캐나다 한인과학기술자협회 매니토바 지부에서는 가을, 겨울 2번의 세미나를 회원 여러분들과 함께 했습니다.

가을 세미나 2020년 10월 16일 금요일 저녁 6 - 8시

류민형 (PhD Candidate, UBC): Are people with chronic respiratory diseases more susceptible to the harmful effects of air pollution?

박정수 (Senior Design Engineer, New Flyer Industries): Source path contribution analysis of acoustic noise on the off highway vehicle cabin

김선미 (Assistant Professor, Department of Psychology, University of Manitoba): Extensions and applications of extended redundancy analysis for research in psychology and related fields

겨울 세미나 2020년 12월 10일 목요일 저녁 6 - 8시

서미영 (Professor, Department of Food and Human Nutrition Science, University of Manitoba: Elmer's manufacturing monorail power assist (Capstone Project)

조은진 (Undergraduate student, Department of Mechanical Engineering, University of Manitoba): Seeking ways to improve Indigenous health in northern Manitoba with smart vertical farms



Min Hyung Ryu



Dr. Jeongsoo Park



Dr. Miyoung Suh

MITACS 소개

Mitacs is a national, not-for-profit organization that has designed and delivered research and training programs in Canada for 20 years. Working with 70 universities, 6,000 companies, and both federal and provincial governments, we build partnerships that support industrial and social innovation in Canada.

Mitacs was founded in 1999 as a Canadian Network of Centres of Excellence, dedicated to supporting applied and industrial research in mathematical sciences and associated disciplines. In 2003, we launched a research internship program designed to increase deployment of highly educated graduates into the private sector. Open to all disciplines since 2007, Mitacs has expanded in response to industrial and university needs, including programs in R&D management, professional skills development, and international research training. Mitacs is committed to its core vision of supporting research-based innovation and continues to work closely with its partners in industry, academia, and government.

김 (Juliana) 헤림, 퀘벡 지부장님

Hyelim Juliana Kim is the Quebec regional president for AKCSE since December 2018. She came to Montreal in 1987 and has been involved in various Korean Canadian student associations before graduating from McGill Engineering. She currently works at Mitacs as the business development director where she accompanies innovative companies/students/professors to obtain research funding. Besides the innovation, she is passionate about the environment, EDI, social justice, human ethics, as well as Korea-Canada collaborations.

For more information: www.mitacs.ca, jukim@mitacs.ca



YGP Corner

Career Development Workshop – Finance Your Career

On May 1, we successfully hosted our second Career Development Workshop under the theme of “personal finance”. This event, which consisted of a series of presentations from guest speakers in the fields of human-computer interaction (HCI) design, chemistry, cancer therapeutics and dentistry, gave insight into how different individuals managed their personal finances throughout their journey through school and the early stages of their career. It was certainly interesting to see the similarities and differences between presentations, given the speakers’ diverse backgrounds and occupations.

The presentations were followed by a casual networking session, which allowed for our attendees to become acquainted with each other. It was a rewarding experience for YGP(N) to see YGP members coming together from all over Canada – we hope this holds true for all those who attended as well.

A huge thank you to all of those who attended, our speakers, as well as to AKCSE for their support in organizing this event.



AKCSE YGP CDW2021

Finance your Career

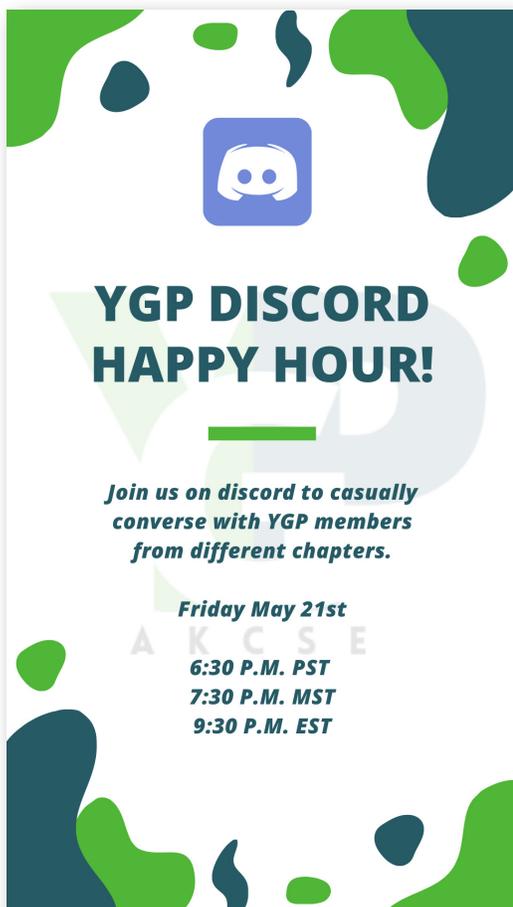
Connect with others in your field and occupation and talk \$\$\$!

May 1, 2021
7 P.M. to 9 P.M. EST
Online over Zoom

For inquiries, please email akcse.ygp@gmail.com.

YGP Working Professionals: We want to hear from you!

For a more inclusive YGP community, we would like to work on incorporating more events/content geared for industry workers. Help us identify where to put in more effort by responding to this short survey: <https://forms.gle/8vcPeo4XiE1zvW689>. Responses will remain anonymous. If you have any questions or concerns, please don’t hesitate to reach out to us at akcse.ygp@gmail.com.



YGP DISCORD HAPPY HOUR!

Join us on discord to casually converse with YGP members from different chapters.

Friday May 21st

6:30 P.M. PST
7:30 P.M. MST
9:30 P.M. EST

Moving forward...

As preparations for CKC 2021 are underway, the YGP group is planning to host a pre-CKC networking session to provide an opportunity for all YGP participants to mingle and get to know each other. More details will follow in the coming months.

In addition to details on the pre-CKC networking session, information regarding CKC registration and corresponding YGP activities will be posted regularly on our social media accounts. Please check back over the months leading up to CKC to learn more!

The YGP Discord Team has also set up a regular happy hour for any member to drop by in case they have questions, wish to seek advice or simply wish to get to know people. Come on and hang out with us!

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

LinkedIn: www.linkedin.com/in/ygp-akcse

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

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

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

YouTube: <https://www.youtube.com/channel/UC1CcK8hgyoKWkb3x6ccgHg>

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



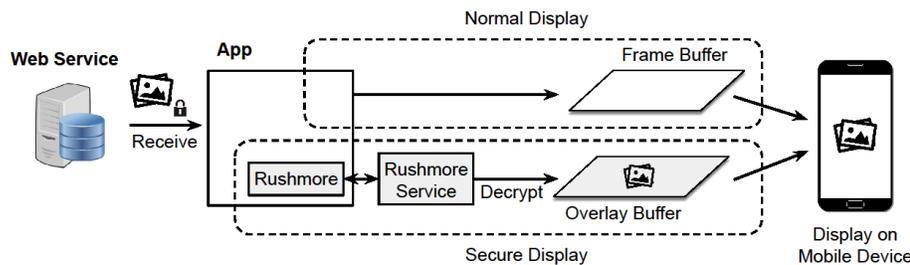
Research Spotlight

Computing Science at Simon Fraser University (SFU)

Steve Ko 교수님 연구실 소개

Steve Ko works in the general area of computer systems software. His current research interest is improving the reliability and security of mobile systems software by developing techniques at the intersection of mobile systems, software engineering, and programming languages. He is an experimental computer scientist who builds software systems to demonstrate the feasibility of new ideas and validate research hypotheses.

Over the years, his group has built several software systems that broadly fall within the area of mobile systems. Some examples include, Rushmore, a system that can securely display static or animated images on a mobile device, Mimic, an Android app testing system that compares app behaviors across different



Rushmore: Securely Displaying Static and Animated Images Using TrustZone,” Park et al., 2021

versions and devices, Reptor, a compiler that makes it easier to instrument (i.e., to inject extra code into) Android apps, BlueSeal, an analysis tool that can detect malicious Android apps, and RTDroid, a variation of Android that can provide timeliness guarantees.

More information at <https://steveyko.github.io/>.

역사속으로! - AKCSE History

2021 AKCSE E-newsletter 발행팀은 장갑수 전 회장님과 안정애 사무장님의 도움으로 역사속의 캐나다과기협 자료들을 찾게 되었습니다. 무려 25년 전 1996년 회보로부터 매우 최근 2015년 뉴스레터까지 많은 자료가 남아 있었습니다. AKCSE History 코너에서는 회원님들과 AKCSE 역사를 함께 공유합니다.

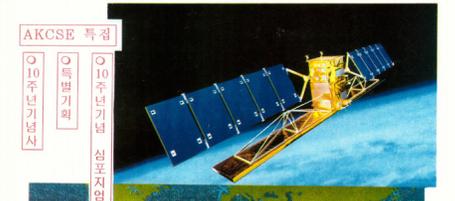
1996년 ‘캐나다 과기협’의 묵직한 폰트로부터 AKCSE의 역사가 쌓아온 그 큰 무게가 생생하게 느껴집니다. 2011년 제1회 CKC 대회 - Canada & Korea Together for a Better Future! - 그리고 올해 개최되는 2021년 대회 - New Opportunities in the New Normal - 까지, CKC 역사도 해를 거듭하여 벌써 10년이 넘어가고 있습니다. 한층 젊으셨던 강철용 교수님, 서미영 교수님, 서동이 박사님의 모습, 대학생 같으신 장갑수 교수님, 아름다우신 조선희 박사님의 모습도 모두 새롭고 반갑기만 합니다. AKCSE 발행팀은 회원님들께서 간직하고 계신 역사속 AKCSE 이야기를 기다립니다. 오래전 과기협 활동 사진들, 함께 했던 회원분들과의 에피소드 등을 보내 주시면 회원분들과 공유하겠습니다.



CKC2011 행사는 밴쿠버 Surrey에서 Keven Lee 회장님의 주치로 열렸습니다.

캐나다 과기협

AKCSE Newsletter VOL.11 No.1 June 1996



25년전... 1996년 회보

회보명: 캐나다 과기협회보
 발행일: 1996년 6월
 발행처: 캐나다 과학기술자협회
 발행인: 강철용
 편집인: 박성한
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AKCSE THE ASSOCIATION OF KOREAN-CANADIAN SCIENTISTS AND ENGINEERS

AKCSE NEWSLETTER

2011 Spring-Summer Issue

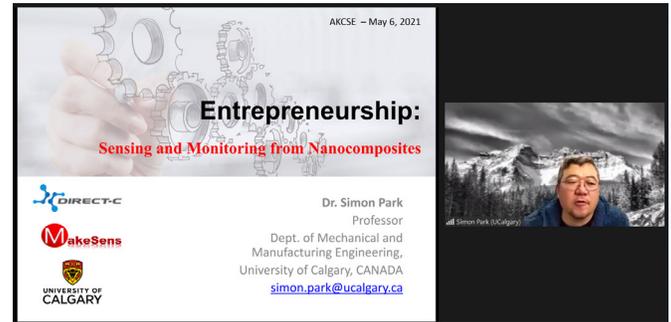
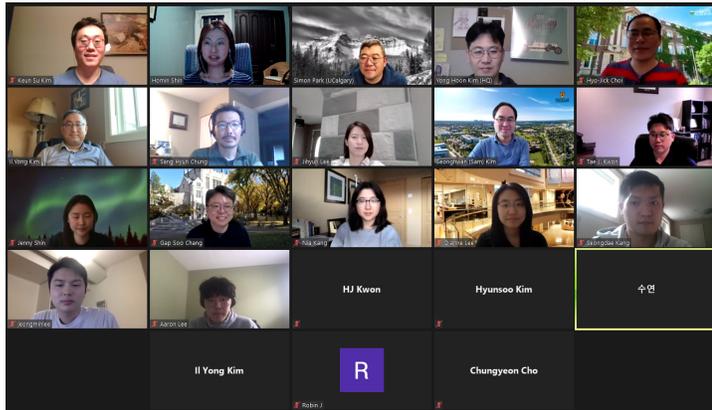
1st Canada-Korea Conference on Science and Technology 2011

Basic Science Pure & Applied Science Nano Science & Technology	Energy & Environment Global Smart Grid Environment & Policy	Information Technology Information, Communications & Networks
Life & Health Science Plant, Health & Biotechnology Bio & Nano Systems	Engineering & Applied Science Aerospace, Automotive & Transportation Civil & Transportation	Entrepreneurship Company Train Professional Marketing Session
Women in Science Leadership and Career Development for Today and Future	Korea International Laboratory & Job Fair Creating Synergy Effect with Associated Exhibition Career Fair	Young City Leaders Student Research Presentation Leadership Conference Award Presentation

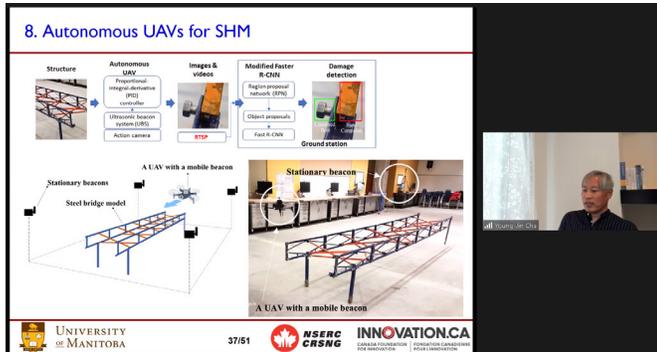
Event Announcements

AKCSE Monthly Seminar Series

AKCSE Seminar Series 두번째 세미나는 5월 6일(목), Calgary 대학교 박상범(Simon Park) 교수님께서 "Entrepreneurship for Scientists & Engineers: Sensing and Monitoring from Nanocomposites"라는 주제로 발표하셨습니다 (총 27명 참여). 세미나는 nanocomposite을 이용한 센서 개발과 이를 오일수송관 모니터링에 적용하여 사업화하는 과정을 소개하셨습니다. 사업화 시 고려해야 할 것들, 그리고 애로사항을 구체적으로 공유함으로써 창업에 관심 있는 회원분들께 실질적인 가이드라인을 제공하는 기회가 되었습니다.



세번째 세미나는 6월 3일(목), Manitoba 대학교 차영진 교수님께서 "Deep Learning-Based Structural Health Monitoring with Autonomous UAVs"라는 주제로 발표하셨습니다 (총 24명 참여). 토목 및 건축 구조물의 안정성 모니터링을 이미지 기법과 Modern Artificial Intelligence (AI) Methodology를 이용하여 더욱 빠르고 정확하며 저비용으로 수행할 수 있는 기술 개발에 대한 소개가 있었으며, 특히 실시간 모니터링을 위한 드론을 적용한 연구는 참석자들로부터 많은 관심이 있었습니다. 더불어 현재 AI 기술의 한계 및 문제점에 대한 심도 있는 논의도 있었습니다.



2021 AKCSE-KWSE Webinar Series

지난 4월 15일 두번째 AKCSE-KWSE Webinar를 개최하였습니다. 한국기초과학지원연구원 선임연구원 정슬기 박사는 "Risk Management: Stabilization of heavy metals in mine waste by basic oxygen furnace slag"란 제목으로 광산 지역에서 유해물질, 특히 중금속을 안정시키고 그 위해성을 줄이는 기술을 소개하였고, 캐나다 퀸즈대학교(Queen's University) 박사과정에 재학 중인 Dianne Lee가 "Self-assembled Monolayer of N-heterocyclic Carbenes Applied to Pathogen Biosensing"의 제목으로 다양한 금속표면 위에 탄소 기반 분자들이 자기조립단분자막(self-assembled monolayer)을 이룬 표면 시스템을 만들고, 이를 홍역(measles)과 같은 병원균을 감지하는 바이오센서로 적용하는 연구 내용을 발표하였습니다. 오는 6월 17일에는 Amy M. Kim (Department of Civil Engineering, The University of British Columbia) 교수님의 발표가 있을 예정입니다. 자세한 정보는 추후 AKCSE 웹페이지와 회원 이메일을 통해 공지됩니다. 회원 여러분의 많은 관심과 참여 부탁드립니다

AKCSE 협회 영상 (<https://akcse.ca/>)

캐나다 한인과학기술자협회의 역사와 연구 활동을 담은 홍보 영상을 협회 웹사이트에서 보실 수 있습니다. 회원 여러분의 많은 호응 기대합니다.

For story ideas, news and announcements, please contact e-newsletter@akcse.org

발행인: 김일웅 | 제작팀: 신호민, Regina Lee, Nia Kang, 이지현