

Conference Greetings

IIT 19th Annual RTC Conference and Expo
October 3 – October 4, 2023

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Dr. Alvin Chin
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Welcome to the 19th Annual Real Time Communications Conference!

- Telecommunications was once a service offered by a single provider.
- Today it is an application that can be implemented by millions of developers as an add-on to their websites.
- It can be mashed up with machine learning, voice technologies, IP-based sensor networks and more.
- As the basis for Next Generation Emergency Communications it will be saving lives and improving outcomes for thousands of people.

- The conference as a venue in which new methods, systems and solutions can be developed, discussed and demonstrated.
- Here, developers , researchers and business leaders can partner to bring these new solutions into common use.
- Over the next two days you will hear about some such collaborations already in progress and you can expect to meet new people with whom you can find common interests and alliances.

The conference's two sponsors are the **Real Time Communications Laboratory at IIT** and the **IEEE Chicago Section**.

- The lab has evolved from its inception in 2004 as a teaching lab associated with a course called 'Telecommunications over IP Networks', to into a venue for research projects, prototype development and testing.
- The lab has hosted the NENA* [Industry Collaboration Event](#) for the last 10 years and we are preparing to host ICE-11 next month.
- We have developed prototype solutions for identifying the floor in a multistory building on which an emergency caller can be found
- This year we hosted **HackRTC**, a hackathon devoted to developing prototype applications integrating AI, and other cutting edge technologies with real-time multimedia communications. **You will hear from the winners during the WebRTC Track at 1:30 PM Tuesday.**

- For the past couple of years Co-Director, [Vijay Gurbani](#), the Chief Data Scientist at [Vail Systems](#) and a Research Associate Professor in the CS Department at IIT, and long-time colleague and friend has been integral to the success of lab projects.
- In our roles as Research Associate Professors, both Vijay and I are focused on expanding the lab's research and development programs.
- *We see this conference as an important venue in which to find both inspiration and collaboration.*

- We hope that this conference continues to provide a forum for all our participants, in which we explore not only current and future technologies, innovations and entrepreneurial initiatives but also the societal impacts of these developments and our role in shaping them.



<https://ieeechicago.org/>



- The [IEEE Chicago Section](#) is also a sponsor of the RTC Conference.
- Under their auspices we are now an official IEEE International Conference.
- This year's conference proceedings, materials and publications will be available on [IEEE XPlore](#).
- **It is my pleasure to welcome Dr. Alvin Chin, the Chair of the IEEE Chicago Section.** He will introduce the many facets of the Section's work.
- After which I will return to introduce the members of the RTC Conference Team.



IEEE Chicago Section

Dr. Alvin Chin

Chair, IEEE Chicago

chair@ieeechicago.org

ieee.org



*Advancing Technology
for Humanity*

IEEE Chicago Section

- Supporting Chicago's engineers since 1893 with over 3000 members
- Largest section in Region 4
- Home section for "Science Kits for Public Libraries (SKPL)"
- 17 Technical Chapters, 2 subsections, 4 affinity groups
- Formed IEEE Chicago Section Industry Engagement Committee in 2022
- 1092 companies in the Section e.g. Elite Electronic Engineering, Panduit, Argonne, Parker Hannifin, DLS Electronic Systems
- Have co-hosted events with ACM Chicago during pandemic and ongoing
- Work with industry and academia: Chicago Engineers Foundation, FutureCon Cybersecurity Conference, MxD, IIT, Lewis University, Oakton College, SAE Chicago

IEEE Chicago Section Chapters and Societies

[Antennas & Propagation/Microwave Theory and Techniques \(APS/MTT\)](#)

[Computer \(CS\)](#)

[Communications \(COM\)](#)

[Electro Magnetic Compatibility \(EMC\)](#)

[Engineering in Medicine and Biology \(EMB\)](#)

[Industry Applications / Industrial Electronics \(IAS/IES\)](#)

[Magnetics \(MAG\)](#)

[Nanotechnology Council](#)

[Power and Energy \(PE\)](#)

[Product Safety Engineering \(PSES\)](#)

[Professional Communications \(PCS\)](#)

[Robotics and Automation \(RAS\)](#)

[Sensors](#)

[Signal Processing \(SP\)](#)

[Systems, Man and Cybernetics \(SMC\)](#)

[Technology and Engineering Management \(TEMS\)](#)

[Vehicular Technology \(VTS\)](#)



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IEEE Chicago Subsections and Affinity Groups

Sub-Sections

- [Fox Valley](#)
- [Northwest Suburban](#)

Affinity Groups

- Women in Engineering
- [Chicago/Rockford Consultants' Network](#)
- Life Members
- Young Professionals



<https://ieechicago.org/>

IEEE Chicago 129th Anniversary

- Saturday, October 14, 2023 from 9 AM to 3 PM
- Loyola University Chicago, Lakeshore campus
- Learn about IEEE Chicago with a free lunch!
- Details and register at <https://bit.ly/ieechicago12>



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- Connect with Us on Instagram:
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- Watch our events on YouTube:
<https://www.youtube.com/@ieeechicago128>

- Website: <https://ieeechicago.org>
- Email: chair@ieeechicago.org

Recognition!



- Before our first presentations at 9:30, I'd like to recognize and thank the team that has put together this conference!
- We thank them for their many hours of hard work and for the fine program that has resulted!



Track Chairs

- **Ronald Marx and Jose Aguerre** – **Research Track Co-Chairs**
- **Maureen Stillman and Chris Mayer** - **Programmable Real-Time Networks Co-Chairs**
- **Alberto Gonzalez** – **WebRTC & Real-Time Apps**
- **Alvin Chin and Dieff Vital** - **Internet of Things Co-Chairs**
- **Jordan Hosier** – **Voice Tech**
- **Mark Fletcher**– **NG Emergency Communications Services**



- Carol Davids, IIT
- Tom Costello, Consultant
- Warren Bent, InCharge Systems
- Vijay Gurbani, IIT and Vail Systems
- Alvin Chin, IEEE Chicago Section
- Sasi Tadanki, IEEE Chicago Section Treasurer

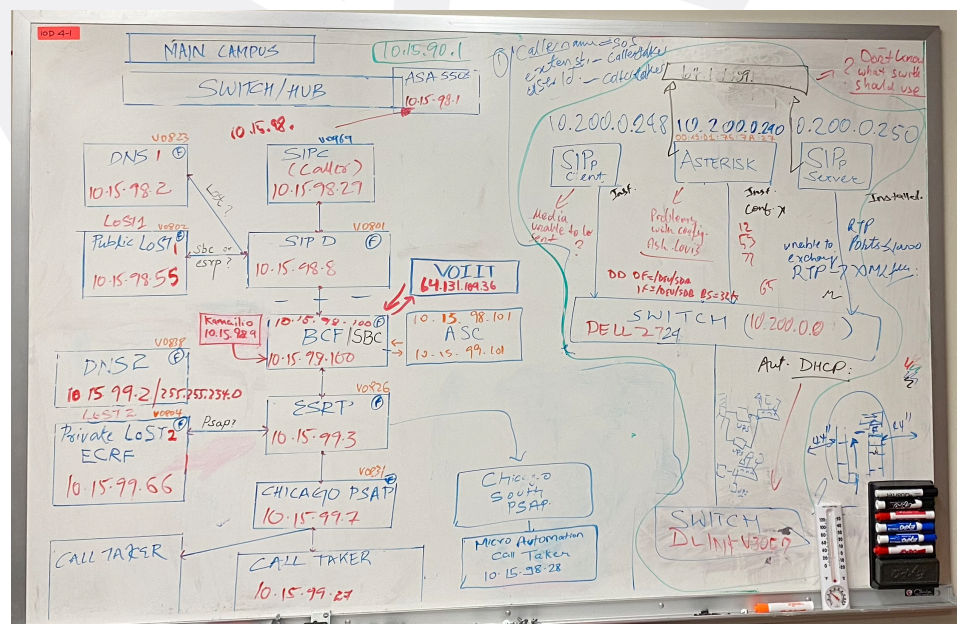
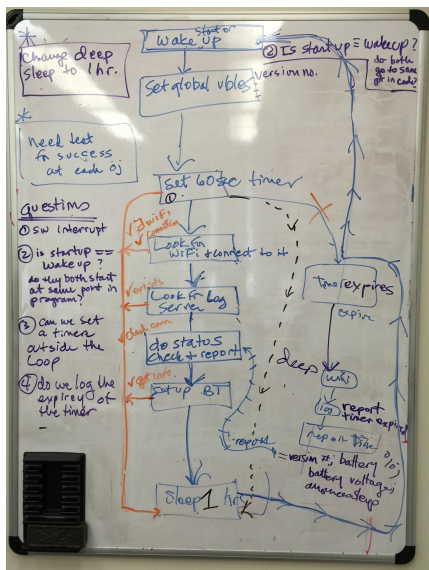


RTC Lab, Network and NG9-1-1 Test Bed Manager

- Joe Cusimano

RTC Lab Support Engineer*

- Kayenat Patil



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Silver Sponsors



Exhibitors



Time...

- We have a very full agenda!
- The track chairs and moderators have been asked to hold fast to the times assigned.
- Please help ensure that no talk is cut short because another talk ran into extra innings.
- Thank you!



- Enjoy the conference, and **"Learn Things!"**



- Twitter feed: @RTC_Conf
- RTC Lab Website <http://cs.iit.edu/~rtc/>