

# CHEMICAL ENGINEERING

LEADERSHIP SEMINAR SERIES

CHRISTOPHE POULAIN

**Wednesday, December 7, 2016**

Sr. Research Software Engineer, Microsoft

## **How do you build a real-time translator? A behind the scenes look at Skype Translator**

**ABSTRACT:** “Star Trek: The Next Generation” was completing its last few seasons when I attended the University of Washington. Like many fellow students, I enjoyed the show and had fun discussing the boundary between science and fiction. I never imagined that years later George Takei –Star Trek’s Mr. Sulu–would come to my workplace at Microsoft to try out the universal translator that my team was building: Skype Translator. In this talk, I would like to share my professional journey from Chemical Engineering to Software Engineering. I will describe my experience and some lessons learned from adding near real-time speech translation into Skype.

**BIOGRAPHY:** Christophe Poulain did his undergraduate Chemical Engineering studies in Toulouse, France. He then came to the University of Washington where he earned his Ph.D. under the supervision of Prof. Finlayson. His research on computational methods led him to Aspen Technology where he worked on real-time optimization, on the equation-oriented solution mode in Aspen Plus and on the inception of the CAPE-OPEN standard. He took his growing passion for building complex software systems to a couple of software startups before joining Microsoft Research in 2008. He currently works on machine translation. As a Principal Software Development Engineer, he leads a team of engineers who apply the latest research in speech recognition and automatic translation to produce software that promises to break down language barriers.

**LECTURE 2:30–3:20 • RECEPTION 3:30  
PHYSICS ASTRONOMY BLDG. PAA A114**



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