

## Invited Talk

Tuesday, November 14<sup>th</sup> | 10:30 AM | BYAC 150

# Building Medical Self-Diagnosis Chatbot – AI in Assisting Patients' Medical Decision

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## Abstract

We directly delve into technical details to build a self-diagnosis chatbot. At the most important module, we describe a set of deep learning, Bayesian network, and statistical approaches that help build the "explainable and easy-to-debug inference and reasoning engine." In addition, we describe semi-automated approaches using deep learning that enrich the medical knowledge base as well as NLP techniques to understand user's daily "medical jargons". At the end, we briefly discuss multi-modal approaches that automatically generate reports from medical images using CNN, RNN, and GAN network. A live demo will be given.

## Biosketch

Dr. Wei Fan is the currently the executive director of Tencent Medical AI Lab in Palo Alto, CA, Shenzhen and Beijing China. Previously, he was senior director of Baidu Big Data Lab in Sunnyvale, CA, Associate Director of Huawei Noah's Ark Lab in Hong Kong and Research Staff Member in IBM T.J. Watson Research. His current interests are in various technical aspects of using artificial intelligence to transform traditional medicine. He received his PhD in Computer Science from Columbia University in 2001.



Tencent AI Lab

Hosted by: Hanghang Tong