

# 電気工学特別講義

2018年6月19日/26日、7月3日

## イントロダクション

# **OU EE ES Lecture Series**

**June 19/26 and July 3, 2018**

## **Lecture introduction**

**Kenji Rikitake**

**りきたけ けんじ**

**力武 健次**

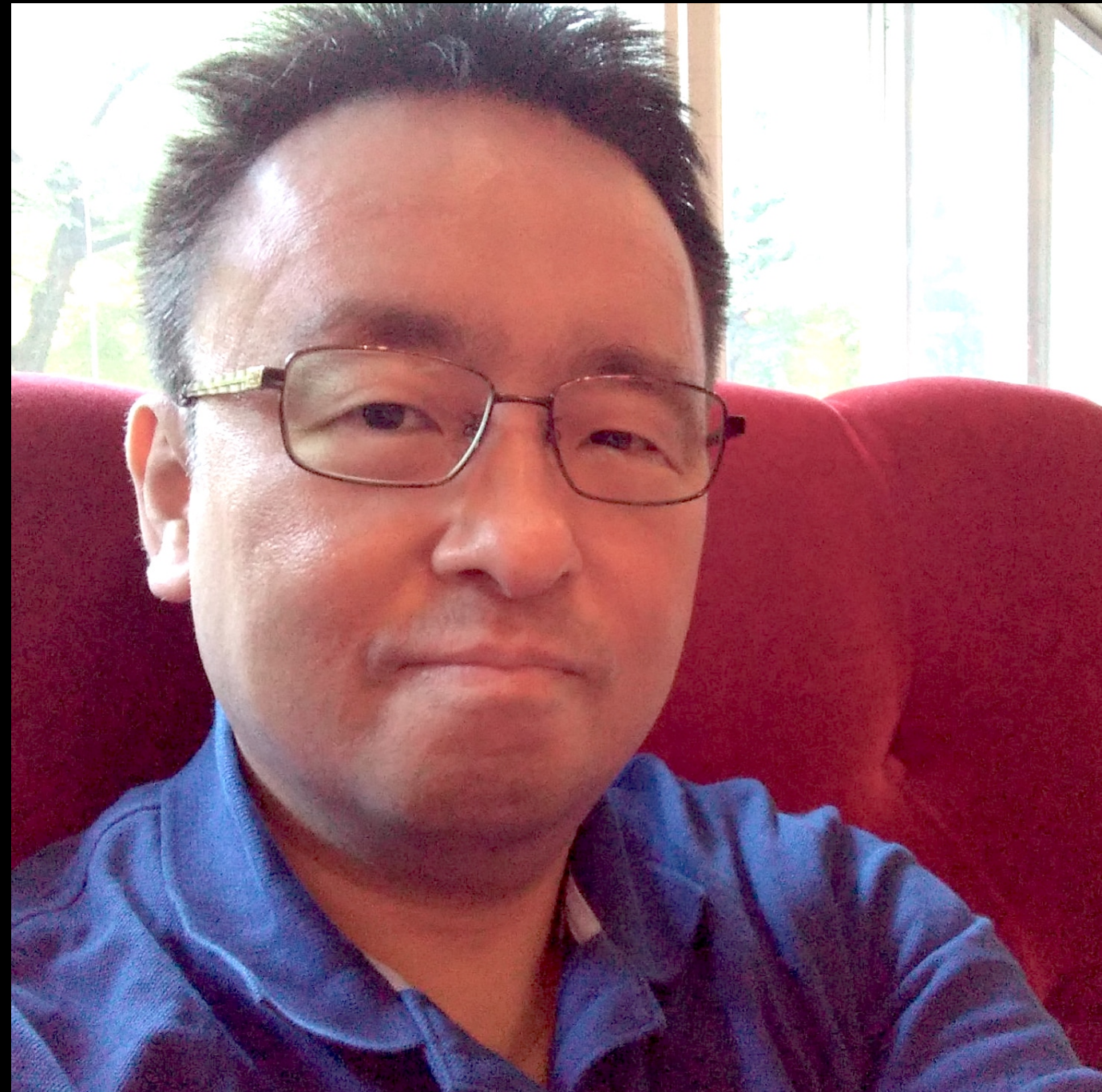
19-JUN-2018

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Science

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Toyonaka, Osaka, Japan

@jj1bdx



# **QUAKE**

**18-JUN-2018 0758JST**

**Direct hit!**

**Were you safe?  
I hope you were!**

**Safety first**  
**Stay alive**

Who I am  
自己紹介

# Professional Internet Engineer



# 技術士

(情報工学部門)

力武健次技術士事務所 所長

**Guest Researcher**  
**Pepabo R&D Institute**  
**GMO Pepabo, Inc.**  
**GMOペパボ株式会社**  
**ペパボ研究所 客員研究員**



**ペパボ研究所**

Pepabo R&D Institute, GMO Pepabo, Inc.

# My career

Working on: Erlang, Elixir, C, FreeBSD, TCP/IP, PHP, mruby, C++, C#, Visual Studio, Moodle, macOS, Windows, Vim, Emacs, Arduino, AVR, radio, music, distributed systems, fault tolerance, whatever.

28 years in Computer Science, 13 years since PhD, 42 years of ham radio op as @jj1bdx, 2010-2012: Professor, ACCMS/IIMC, Kyoto University, whatever.

**... Those past records are  
completely meaningless  
unless you are working on  
what you really want to  
do right now.**

**Ignore past  
achievements  
Focus on *now***

# Lecture theme

# **Information delivery on internet**

# **In other words: How internet works**



# 容錯設計

**Fault-tolerant design**

**Modern life is  
full of failures**

# **How internet works under failures?**

# **Technology 1: Packet switching**

# **Technology 2: Flexible packet routing**

# **Technology 3: Centralization and decentralization**

**Summary:**  
**Put in packets**  
**Route flexibly**  
**Decentralize**

**OK let's get  
down to  
business!**