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題目

Programmable Switches: Technologies and Applications

Abstract:

Programmable switches now are widely used in data center networks and 5G networks for many of its advantages over traditional switches.

Programming Protocol-Independent Packet Processors (P4) switches, due to their data-plane programmability, have been used to create many novel applications that cannot be realized by traditional switches in the past. In this talk, I will present the P4 switch architecture and P4 language, followed by its novel applications designed and implemented by my laboratory in the past few years. In the end, I will review the strength and weakness of P4 hardware switches to conclude this talk.

個人簡介

王協源博士於 1999 年在哈佛大學獲得電腦科學博士學位,之後加入國立陽明交 通大學擔任資訊學院資訊工程系助理教授、副教授、和教授。期間擔任過資訊學 院網路工程研究所所長和資訊科學與工程研究所所長等職務。王博士的專長包含 物聯網、機器學習、軟體定義網路、可程式化交換機、網路模擬,數位分身等, 目前借調到中央研究院資訊科技創新研究中心擔任智慧物聯網專題中心執行長。