

ETAPS AWARD

LAUDATIO FOR KOHEI HONDA

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Kohei Honda (1959–2012) died of cerebral haemorrhage on December 4th, 2012. He received an MSc (1991) and a PhD (1994) in Computer Science from Keio University, in Yokohama, Japan. Kohei started to show his talent already as a student: strikingly, even before completing his MSc, he had published a milestone paper which revolutionised the field of processes calculi by showing us how to formalise asynchronous communications.

Kohei moved to Europe in 1995 and held positions at the Universities of Manchester, Edinburgh, and Queen Mary University of London, where he was made a reader in October 2002. He has been official external advisor of WS-CDL, ISO TC68 WG4 UNIFI (UNiversal Financial Industry message scheme) and AMQP (Advanced Message Queuing Protocols). He was the initiator of JBoss Scribble, and worked with several industrial partners, including Cognizant, Red Hat, VMware, Bank of Japan, Hitachi and UBS, as well as in the multidisciplinary Ocean Observatories Initiative.

The team of the Ocean Observatories Initiative CyberInfrastructure remembers him as possessing a rare cluster of qualities:

“His aesthetics, precision and enthusiasm for our mutual pursuit of formal session types [. . .] were, as penned by Henry James, lessons in seeing the nuances of both beauty and craft, through a rare cluster of qualities—curiosity, patience and perception; all at the perfect pitch of passion and expression.”

Indeed Kohei was a dedicated, passionate, enthusiastic scientist and—more than that!—his enthusiasm was contagious. He was a theoretician who really succeeded in building bridges with practitioners. The collaboration between Kohei and his team, W3C, Steve Ross-Talbot and Robin Milner transformed into Pi4 Technologies and then into Savara and gave birth to Scribble, his own language for the description of application-level protocols among communicating systems.

Among Kohei's milestone research, I have already mentioned his 1991 epoch-making paper at ECOOP (with Mario Tokoro) on the treatment of asynchrony in message passing calculi, which has influenced all process calculi research since. Furthermore, Kohei established the first fully abstract model for call-by-value programming languages and demonstrated deep connections between game semantics and process calculi. At ETAPS 1998 he introduced (with Vasco Vasconcelos and Makoto Kubo) a new concept in type theories for communicating processes: it came to be known as 'session types', and has since spawned an entire research area, with practical and multi-disciplinary applications that Kohei was just starting to explore—as always in partnership, in life as in research, with his wife Nobuko Yoshida.

Kohei leaves behind him enormous impact, and a lasting legacy. He is irreplaceable, and I for one am proud to have been his colleague and glad that ETAPS took the opportunity to award to him, albeit posthumously, this first edition of the ETAPS Award.