# **ALVIN JUDE**

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I enjoy working on the whole stack, but my primary interest is in HCI. My passion lies is in the human factors of computer science; to improve how people interact with technology. I enjoy the challenge of identifying a problem, envisioning a solution, testing solutions and design considerations with a prototype, and performing quantitative analysis to test my hypotheses. I have previously worked with next-generation user interaction, specifically touchless hand-gestural interaction, with the goal of building improving accessibility. My more recent work focussed on improving recommender systems and next-generation media, generally how people interact with them.

#### **EDUCATION**

Masters of Computer Science · 2012–2014 · Baylor University

Specialization: Human Computer Interaction

THESIS: Giving the Users a Hand: Towards Touchless Hand Gestures for the Desktop

Bachelor of Computer Science · 2002–2005 · Coventry University

RANK: Honours, Second Class Upper

THESIS: Remote PC Manipulation via PDA over Bluetooth

### **PUBLICATIONS**

Personal Space: User Defined Gesture Space for GUI Interaction. Alvin Jude, G. Michael Poor, and Darren Guinness. 2014. In CHI '14 Extended Abstracts on Human Factors in Computing Systems. (Toronto, Canada), ACM. http://doi.acm.org/10.1145/2559206.2581242

An Evaluation of Touchless Hand Gestural Interaction for Pointing Tasks with Preferred and Non-preferred Hands. Alvin Jude, G. Michael Poor, and Darren Guinness. 2014. In NordiCHI '14 Proceedings of the 8th Nordic Conference on Human-Computer Interaction, (Helsinki, Finland), ACM. http://dx.doi.org/10.1145/2639189.2641207

Evaluating Multimodal Interaction with Gestures and Speech for Point and Select Tasks. Alvin Jude, G. Michael Poor, and Darren Guinness. 2014. In NordiCHI '14 Proceedings of the 8th Nordic Conference on Human-Computer Interaction (Helsinki, Finland, 2014), ACM. http://dx.doi.org/10.1145/2639189.2670267

Gestures with Speech for Hand-Impaired Persons. Darren Guinness, G. Michael Poor, and Alvin Jude. 2014. In ASSETS '14 Proceedings of the 16th International ACM SIGACCESS Conference on Computers and Accessibility (New York, NY, USA, 2014), ACM. http://dx.doi.org/10.1145/2661334.2661398

Models for Rested Touchless Gestural Interaction. Darren Guinness, Alvin Jude, G. Michael Poor, and Ashley Dover. 2015. In SUI '15 ACM Symposium on Spatial User Interaction (Los Angeles, CA, USA), ACM <a href="http://dx.doi.org/10.1145/2788940.2788948">http://dx.doi.org/10.1145/2788940.2788948</a>

Modeling Mid-air Gestures With Spherical Coordinates. Darren Guinness, Andrew Seung, G. Michael Poor, Ashley Dover, and Alvin Jude. 2015. In SUI '15 ACM Symposium on Spatial User Interaction (Los Angeles, CA, USA), ACM. (Best Poster Award) http://dx.doi.org/10.1145/2788940.2794356

### TECHNICAL SKILLS

 $\begin{array}{lll} B_{ASIC} & : R \cdot Matlab \cdot C\# \cdot Tomcat \cdot HBase \cdot JQuery \cdot Css_3 \cdot HAProxy \cdot Heartbeat \cdot DRBD \\ Intermediate & : Python \cdot LATEX \cdot C \cdot PostgreSQL \cdot Nmap \cdot Git \cdot Hibernate \cdot Objective-C \cdot Memcached \\ Advanced & : NGinX \cdot Puppet \cdot Nagios \cdot Collectd \cdot PHP_5 \cdot MySQL \cdot Java \cdot Symfony \cdot OpenVZ \\ \end{array}$ 

#### NON-TECHNICAL SKILLS

COMMUNICATION : Former Malaysian Public Speaking Champion

Entrepreneurship: Baylor New Venture 2014: Top-5 Finalist & 3rd place Elevator Pitch

Languages : English (Native) · Malay (Intermediate)

### WORK EXPERIENCE

## Ericsson · 2014–present · Researcher

Currently in the media group, focussing on Next Generation Media Systems. Research focuses on consumer facing systems, including interaction with recommender systems, personalization, media discovery. Performs self-driven research for patent portfolio as well as collaboration with academic partners.

Reference: Nimish Radia · nimish.radia@ericsson.com

## Baylor University · 2013–2014 · Research Assistant

Setup new HCI lab. Mentored juniors, established engineering procedures and infrastructure. Performed research in dand-gestural interaction and explored research options with other next-generation devices. As TA, performed overhaul, and introduced framework and developer's manual for software used in-house for teaching database.

Reference: G. Michael Poor · michael poor@baylor.edu Reference: Greg Speegle · greg\_speegle@baylor.edu

## Self Employed · 2010–2012 · Technical Consultant

Served as an independent consultant for various project and companies including the following:

## iOS Development, AGILE PERSPECTIVES — MALAYSIA, 2011–2012

Performed R&D for use of Apple products in financial services. Built and deployed app for one international insurance corporation. Built app for a consumer-facing startup dealing in retail. Role included requirements gathering, feasibility studies, business case development, and technical consultation.

# System Administration, CouchSurfing.org, 2010–2011

Daily operations: monitoring, security, optimization, deployment, etc. Deployed a cluster of static content servers with NGinX to reduce the load off the dynamic servers, which resulted in higher reliability or website as a whole. Tools of the trade included Puppet, Zabbix, HAProxy.

# Aflexi · 2009–2010 · System Engineer

Aflexi was a CDN Software startup, and is currently a division of OnApp. Responsibilities were more DevOps involving backend development and system administration. Built a monitoring infrastructure from the ground up (traditionally done with Nagios) with custom scripts running on a specialized Collectd infrastructure; used to feed PowerDNS for DNS-based CDN routing. Tools of the trade included Puppet, Zabbix, Nagios, Reprepro, RRD.

Reference: Whei Wong · whei.wong@onapp.com

# iMocha Consulting · 2007–2010 · Team Lead

Initially hired as a Junior Java Developer, but quickly tasked to build and run a LAMP team of up to 8 people, dealing mostly with financial institutions. Responsibilities included hiring, firing, and mentoring programmers, system administrators, system analysts, and interns, as well as requirements gathering from clients.

Reference: Koh Kok Wei · kokwei@imocha.com.my

## Sony Manufacturing · 2005–2007 · Engineer

Developed Linux-based software required for manufacturing. Developed a tool used to trace products which helped cut down tracability time from 2 working days to about 4 hours. Tools of the trade included MFC, VB.NET, PHP, Postgres, GTK.