



# School of Informatics internationalisation activity: Review and forward look

Henry S. Thompson

\$Id: reviewAndPlan.xml,v 1.7 2017/06/22 15:33:16 ht Exp \$

## Table of Contents

1. [Introduction](#)
2. [Background](#)
3. [Existing formalised activities](#)
  - 3.1. [Already in place in 2013: Beihang joint PhD](#)
  - 3.2. [Established since 2013: Peking University, Dalian University of Technology, South China University of Technology, Ameson, Stanford](#)
  - 3.3. [Just starting](#)
  - 3.4. [Inconclusive efforts](#)
4. [Existing Ad hoc activities](#)
5. [Proposed expansion: School Internationalisation Team](#)

## 1. Introduction

I've served as School Director of Internationalisation for 4 years. As I'm heading on sabbatical next year I'm handing over to Don Sannella. This document summarises what has been accomplished over the last 4 years, and presents a plan for the future.

TL;DR: What one person can do has been done. We can and should do more. That needs more resources: mostly human, mostly academic, some administrative.

## 2. Background

For many years international relations and activities connected with the School were handled on an *ad hoc* basis, typically by academic staff with a personal connection with the country concerned. Our relationship with the British University in Dubai is an exception, with a specific admin role allocated for the ongoing maintenance of this connection.

Partly in response to a College initiative which allocated 10% of an FTE to support internationalisation, an admin role entitled **School Director of Internationalisation** was created in August 2013, and I was appointed to it.

Aside from membership of the College International Group, which meets approximately bi-monthly, no specific tasks are explicitly allocated to this role, but my activities to date can be usefully characterised as either

- *ad hoc*, that is, one-off actions in response to particular individuals or opportunities

or

- formalised, that is, relating to or covered by a Memorandum of Understanding (MoU) and/or of Agreement (MoA)

### 3. Existing formalised activities

Once one gets beyond the generic, University-level agreements, specific collaborations tend to focus on either research and teaching. International research collaboration is of course widespread, but usually informal. Thus although in a few cases I've assisted with the creation of the necessary formal documentation of an existing or planned research collaboration, almost all the effort has gone into agreements covering either summer programmes or some form of joint or double degree, and that is what the new HoS and DPS asked me to focus on from the autumn of 2014.

#### 3.1. Already in place in 2013: Beihang joint PhD

Between 2013 and 2015, under an agreement negotiated by Don Sannella with Beihang University in Beijing, China, we admitted a total of 5 students for a joint PhD, on the basis of 2 years enrollment in each institution, with Informatics at least part-funding the time in Edinburgh. One of these has been awarded their PhD, two are writing up and two (admitted in 2015) are on course (although one is back in China). No new students are being admitted as Informatics can no longer make any funding contribution.

#### 3.2. Established since 2013: Peking University, Dalian University of Technology, South China University of Technology, Ameson, Stanford

A small delegation from Peking University (PKU) visited us in November of 2013, looking to expand their summer placement programme and to explore the possibility of a 3+2 double degree. I negotiated an agreement for both of these, and we have hosted PKU students (typically between their 3rd and 4th year) for a [two-month summer intensive research experience](#) every summer since 2014: the fourth such group are due to arrive in a few weeks' time. We also accepted our first 3+2 student for entry in 2014, and another in 2015. The first withdrew after the 1st semester of 2nd year, the second will receive their MInf award at the July graduation. There were no applicants for 2016 or 2017 entry: We have a plan in place to improve our recruitment efforts, with help from Wenfei, but this aspect of the relationship will need to be reviewed if numbers don't improve.

*Terminology note: A joint degree programme is one leading to a single degree being awarded, with two universities' names on it. A double degree programme is one leading to two degrees being awarded, one from each partner university. A '3+2' double degree is one where a student having completed three years at one university enters 4th year in Edinburgh for an MInf. Similarly a '2+2' means entry to 3rd year after two years elsewhere, for a BSc or BEng.*

Elsewhere in China we were very fortunate to be able to build on relationships already built up over many years by our colleagues in Engineering (they admit around 35 Chinese students every year to 2+2 degrees across all subjects in the School). So far we have concentrated on two Chinese universities with good Computer Science departments: Dalian University of Technology (DUT), in the northeast and South China University of Technology (SCUT) in the south. In 2014 courtesy of collaboration with colleagues in Engineering we admitted two SCUT students to the CS&E programme. In subsequent years we have done [our own screening and interviewing](#), with admissions as follows:

**2015** 2+2: 3 CS&E; 2+3\*: 1 CS&P  
**2016** 2+2: 1 CS; 2+3: 1 AI  
**2017** 2+2: 3 CS, 1 AI; 2+3: 1 AI&CS; Ameson\*\*: 1 CS

\* A 2+3 admission is for strong applicants with a shortfall in Informatics courses that make entry to 3rd year inappropriate: they are admitted to 2nd year and will receive an BSc or BEng after 3 years with us.

\*\* Since 2015 we have been participating in the Ameson programme which identifies and screens high-achieving Chinese final-year school students and helps them apply to UK

universities. For the first time this year we have been successful in recruiting one of these who will start with us in the autumn.

As of June 2017 the net income to the University from these students with Informatics's name on it, allowing for sharing joint degree income and the scholarship rebate all such students receive, totals £210,325. As of June 2018 this will rise by a further £172,175 because of the six new single-honours students due to arrive this autumn.

In the summer of 2016 we hosted [a one-month summer programme for 16 Stanford undergraduates](#), led by Stanford faculty member Mykel Kochenderfer (PhD Edinburgh 2006). In the case of both this programme and the PKU summer programme, we depend on individual Informatics academic staff to volunteer to supervise a visiting student, and the response has always been very strong. Such supervisors are given a share of the bench fees generated for use to support their research and/or students.

### 3.3. Just starting

A number of efforts have recently been undertaken to lay the groundwork for future expansion.

In May 2016 I visited Mexico City (UNAM, UAM, Tec de Monterrey), Columbia (UNC) and Chile (PUC, NUC), the latter as part of a major CSE delegation which is part of new CSE initiative to build links with PUC (the Pontifical University of Chile). There is considerable potential with UNAM and PUC to develop both research and degree programme links as well as working to gain (or in the case of Mexico regain) a working relationship with the respective national funding bodies (CONACyT and CONICYT) for fully-funded support for MSc and PhD students to come here. Don will be part of a University delegation to Mexico planned for November and will take this forward.

In November of 2016 I was part of a major University-level delegation to Singapore, focussing on NUS, NTU and A\*STAR, which was followed up in April by a further visit from Don Sannella. There looks to be significant opportunity for double- and/or joint-degree programmes with NTU and NUS, and a possibility of research mobility support from A\*STAR. Don continued on to Hong Kong as part of a larger University group, where prospects are less clear: there are several strong, but small, computer science groups at the top HK universities. There are certainly opportunities for cooperation at the level of individual research cooperation, for example for joint PhD supervision between Phil Wadler and a colleague at HKU. The potential for undergraduate-level programmes is however not yet clear.

During my most recent visit to PKU in March, it emerged that they are very interested in launching a Design Informatics programme, and Maria Wolters has been invited to visit for a week in July at their expense to explore possible routes for collaboration.

### 3.4. Inconclusive efforts

There were three cases where some negotiation and planning took place, but in the end no programme was put in place:

- Beginning in December of 2013 and extending over several months and several visits, after an introduction by Igor Goryanin representatives of a proposed new university of technology in a new-town called Innopolis, Kazan, Tatarstan pitched Informatics for involvement. After some initial enthusiasm, we declined.
- In early 2014 Leonid Libkin introduced a colleague from the Moscow Higher School of Economics, and we went some way down the road towards some kind of joint post-graduate sharing arrangement, but this went into cold storage after the collapse of the rouble against the pound.
- In an attempt to build on the joint PhD agreement, I visited Beihang three times between 2014 and 2016 and got quite a long way down the road to agreeing a 3+2 double degree programme. Unfortunately in 2016 Beihang decided, at the University level, that they would not enter in to any agreements that involved payment to another institution.

## 4. Existing *Ad hoc* activities

There's been a steady trickle of meetings with visitors. Sometimes this means high-profile high-level teams from existing or potential University-level partners, with a meeting in the Raeburn room. With one exception (see [Chile](#) below) this has never had any concrete outcome for Informatics in my experience. Sometimes it means hospitality for individuals, often essentially just courtesy calls, for example lunch with the Princeton Assistant Dean of Students (International).

Up until 2017, groups of students or dignitaries from abroad who wanted to visit were my responsibility. This was sometimes straightforward, if all that was wanted was a tour of the Forum and a brief introduction to Informatics, but sometimes a major effort, involving recruiting colleagues for a programme of presentations, a catered meal, a tour and a chance to meet the HoS. This function has now been passed to the Communications Team, which is a great relief.

## 5. Proposed expansion: School Internationalisation Team

Much of what has been achieved over the last four years has drawn heavily on the experience and material resources of other Schools in CSE, particularly Engineering. To expand beyond what we are doing now we need to follow their example, as we are at, or indeed past, what one academic duty slot can manage: we need more resource. Tom Bruce, Engineering Director of Internationalisation, has a team of 4--6 additional academic staff helping him, 3 for China alone, as well as an 80% senior admin assistant (who has provided crucial administrative assistance for our double degree student admissions and pre-session): we need to move in a similar direction.

The primary goal of this expansion is to substantially increase our double- and joint-degree intake: we aim to at least double our intake from China and to launch programmes in two or three other geographical areas to the point where we are seeing 4-5 students entering from each by autumn 2020.

To achieve this we propose the creation of an Internationalisation Team, with one 'big' duty slot for the Director and a number of 'medium' duty slots for Area Liaisons, as well as a designated administrative support role. Primary responsibilities will be as follows:

### **Director**

High-level negotiations at the start of relationships; College International Group member; A seat at School Strategy Committee; Strategic policy development (where do we go, when, with what resources); Budget-holder for Team expenses; Meet-and-greet with visiting dignitaries

### **Area Liaisons**

Initially for China, Central and South America, Middle East (including Dubai/BUiD). India and Southeast Asia most likely next steps. Responsible for relationship management, typically two visits per year, recruitment/promotion in the autumn and interviews in the spring; oversight of admissions process and summer pre-session. We have candidates in mind for the initial three.

### **Administrative support**

Managing summer, double- and joint-degree programmes means operating a complex business process with actions required throughout the whole year. Most of this does *not* require academic staff to operate. We've had invaluable help with the University-facing aspects of this from Christine Sinclair in the Engineering Teaching Office, and that will continue, possibly with some explicit support from College, but there is a lot which we have to do ourselves. This work needs a designated person, because it involves building personal relationships with opposite numbers in the departments and international offices of our overseas partners.

Note that two existing areas of School international engagement are *not* mentioned above: ERASMUS and 3rd-year exchanges. I have not to date taken those as being part of the remit of the School Director of Internationalisation, but that judgement could of course be revisited (but only insofar as to where those activities sit within our overall administrative structure, i.e. *not* as an opportunity for reducing/combining duty roles).

Financial costs to date have been modest, going almost entirely on travel, with small amounts in support of summer programmes and hospitality. The annual total has certainly been less than the income from BUiD of £25,000/annum. The above plan will of course increase the travel costs, perhaps by a factor of between two and three—a future net budget figure is difficult to project in detail given exchange rate uncertainties, the likelihood of a drop in BUiD income and the uncertainty of the rate at which various new relationships will come online.

The basis for growth is already in place for China (through existing relationships built up by ourselves and our Engineering colleagues) and Mexico/Chile (initial contacts made by Henry in 2016 and existing research relationships), as well as Singapore and maybe Hong Kong, which Don will take forward himself in the first instance. The opportunity is substantial: given the necessary resources, it can be exploited to our considerable benefit.