# HAIC Report - Summer 2017

Distribution: Public

### Introduction

A year ago, in the summer of 2016, the Deans of Science at Aalto University and University of Helsinki established <a href="Helsinki-Aalto Center">Helsinki-Aalto Center for Information Security (HAIC)</a> as a joint strategic initiative. The initial mandate of HAIC was to "focus on offering scholarships for talented master's students choosing to specialize in information security" with a mission to refine to a broader scope in subsequent years. The initial mandate was motivated because of the threat of likely drop in the quality of application to the MSc programs in both universities due to factors like the introduction of tuition fees for students from outside the European Union and the ending of the highly successful <a href="NordSecMob">NordSecMob</a> program at Aalto University which brought excellent international students to Finland and trained them in security and mobile computing for a decade. One of the reasons for the success of NordSecMob were the generous living cost scholarships to top students, funded by the Erasmus Mundus program.

Prof. N. Asokan (Aalto University) was nominated as the Director of HAIC while Prof. Valtteri Niemi (University of Helsinki) was nominated as the Deputy Director. Ms. Eija Kujanpää (Aalto University) agreed to serve as the co-ordinator of HAIC.

### Setup and co-ordination

A website (<a href="https://haic.aalto.fi">https://haic.aalto.fi</a>) was set up. Professors working on areas related to information security at both universities were invited to list their research groups (<a href="https://haic.aalto.fi/research/">https://haic.aalto.fi/research/</a>) and course offerings (<a href="https://haic.aalto.fi/education/">https://haic.aalto.fi/education/</a>) on the website. Several groups provided information that has been added to the website. Several mailing lists were also set up.

The co-ordinator arranged several meetings between HAIC and different university stakeholders in order to agree on the HAIC's modus operandi.

## Fundraising

In consultation with the Deans, it was decided that

- a. Deans will offer a number of tuition fee waivers for incoming top students from outside the EU
- b. HAIC leadership will solicit donations from industry to help fund living cost scholarships for incoming top students from outside the EU

In addition, Dean of Aalto University School of Science set aside some funding for HAIC. In consultation with the Dean, it was decided to use this funding to grant "honours work contracts" for incoming top students who do not receive living cost scholarships.

A "letter to donors" was drafted. It was checked (revised based on feedback) and approved by various stakeholders. The final letter was sent to several industry partners. The letter sought two kinds of donations. Full donations (20 000 € or more) or supporting donations (5 000 € or more). It described proposed HAIC activities including the event where the donors and the supporters can meet and interact with HAIC scholars. It also stipulated that the HAIC advisory board (consisting of HAIC leadership and donors) will meet once a year.

<u>Fundraising was successful.</u> Two companies, F-Secure and Intel, became HAIC donors. Nixu became a HAIC supporter. A total of 45 000 € was raised through industry donations.

### **Publicity**

Having secured tuition fee waivers and funding for the living cost scholarships as well as the honors work contracts, HAIC publicised this information on its website (<a href="https://haic.aalto.fi/scholarships/">https://haic.aalto.fi/scholarships/</a>) and social media (e.g., <a href="Aalto CCIS">Aalto CCIS</a> program's Facebook post). HAIC's industry partners also publicised HAIC scholarships (e.g., <a href="Facebook posting of Nixu">Facebook posting of Nixu</a>).

The program web pages also mentioned HAIC scholarships. (e.g., <a href="http://www.aalto.fi/en/studies/education/programme/security\_and\_mobile\_computing/">http://www.aalto.fi/en/studies/education/programme/security\_and\_mobile\_computing/</a>)

### Application process and selection

#### **Aalto University:**

The selection committee decided that the living cost scholarships will be **7000 €/year for two years**. The figure was chosen to encourage the HAIC scholars to seek internships during the summers as well as paid thesis positions when they are ready to write their MSc theses (typically during the last 6 months of their 2-year program)

The HAIC major at Aalto University's CCIS programme ("Security and Mobile Computing") received 50 applications. The selection committee decided to send admission offers to 11 applicants (9 non-EU and 2 EU). **Three non-EU applicants** were offered full living cost scholarships as well as full tuition fee waivers. Two of them accepted. In addition, **two applicants** (1 non-EU and 1 EU) were offered honours contracts. One of them accepted. The other, a non-EU applicant, was offered a 50% tuition fee waiver and he declined.

In addition, Aalto University selected 5 Russian double degree students to the Security and Mobile Computing major. The double degree collaboration with ITMO University (<a href="http://en.ifmo.ru/en/">http://en.ifmo.ru/en/</a>) was initiated in 2016 and for the first application round in spring 2017, 5 students were selected and accepted the seat offered at Aalto. The students have already taken their first year studies at ITMO's "Computer System Information Security programme" and will now continue at Aalto for their second year, including a jointly supervised Master's thesis. ITMO University double degree students are given full tuition fee waivers in addition to ITMO's own scholarships.

The total number of new students selected from outside of Aalto and beginning their studies in the Security and Mobile Computing major in autumn 2017 is eleven students, including 5 ITMO students.

#### **University of Helsinki:**

University of Helsinki has two Master's programmes inside which it is possible to study a major within the HAIC scope. These are "Master's Programme in Computer Science" and "Master's Programme in Data Science". The primary program is the former one. It includes the "Networking and Services" study line with Information Security as one of the main ingredients.

Master's programme in Computer Science received 110 applicants out of which 61 advanced to academic evaluation. Finally, 39 applicants were selected. At the time of writing, 3 applicants have already paid a tuition fee.

For the Master's program in Data Science, the numbers are: 85 applications, 54 advanced to academic evaluation and 22 were selected. At the time of writing, 2 students have already paid the tuition fee.

One applicant was offered a scholarship but the applicant declined, as did the two next ones in the ranking list. Therefore, only a tuition fee waiver was offered to one applicant.

### HAIC scholars of 2017

#### **Aalto University:**

This table summarizes the list of HAIC scholars of 2017 at Aalto University and the type of support they receive.

Name	Nationality	Education	Tuition	Support
Gauhar, Zaheer Ahmed	Pakistan	Pakistan	waiver	scholarship
Khan, Muhammad Abdullah	Pakistan	Pakistan	waiver	scholarship
Kulhavy, Martin	Czech	Austria	-	honours

### **Outlook**

A living cost scholarship for one incoming student costs **14 000 €/two years.** In order to offer a similar level of living cost scholarships (three) at Aalto University during the future admission rounds, industry donations of **42 000 € / year** would be required. We hope that the current HAIC donors and supporters will continue their donations in subsequent years. We also hope to attract new industry partners to make additional donations to support the HAIC scholarships.