



enhAnced Mobile BiomEtRics

DELIVERABLE: D2.1

Detailed Plan for the Training Programme

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Coordinator:	Richard Guest, University of Kent, Canterbury, UK

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Authors / contributors	Mateusz Trokielewicz, Adam Czajka, Richard Guest, Claus Vielhauer, Raul Sanchez-Reillo, Patrizio Campisi
Contributing partners	WUT, UNIKENT, OVGU, UC3M, UNIROMA3

1. Introduction

AMBER provides the training that is a combination of a) supervision from host and secondment institutions, b) training events that include six-monthly research conferences and workshops, and c) courses provided by host and secondment institutions.

Supervision from host and secondment institutions are crucial in AMBER and provide a comprehensive guidance to the participating PhDs enabling them to prepare high-quality doctorate theses in the field of mobile biometrics and security. Research conferences and workshops are major events which serve as platforms to exchange knowledge and current research progress, and crucially provide a forum for ESRs, AMBER scientific staff and Visiting Researchers of international standing to discuss research ideas and direction. Courses provided by the AMBER network offer not only up-to-date scientific knowledge, but also allow to develop transferable skills such as management of research groups, ethical aspects of conducting research in human identification area, commercial exploitation of the project outcomes, intellectual property rights, and others.

The purpose of this deliverable is to provide an overview of the structure and timing of the training events. Dates and venues and tentative programmes (including lectures given by Visiting Researchers and sessions on complementary research skills) for all research workshops and conferences are given. The content of each event may be subject to change as the AMBER network progresses.

2. Conferences and Workshops

2.1 AMBER Workshop I and Network Launch

November 2017 – Canterbury (3 Days)

Day 1: 9am start

- AM – Introduction to the AMBER Network (Richard Guest)
- AM – Practical information on Network operation (Richard Guest + Others)
- AM – ESR Introduction (10 x 5 minute presentations on background and experience)
- PM – State of the Art in Biometric Systems – Panel Session (facilitated by Claus Vielhauer). ESRs assigned to represent a variety of stakeholders who will question the Panel concerning biometric systems implementation and future developments.

Day 2: 9am start

- AM – Team building exercise (TBA)
- AM/PM– Complementary Skills Training
 - Academic Publication Overview: Presentation and Discussion
 - Effective Dissemination of Material – Kent Research Services
 - World of Standards (Farzin Deravi)
- PM – Discussion: Opportunities within Network – What do ESRs want to do? – Outline possibilities.

Day 3: 9am start

- Steering Board Meeting
- EAB Symposium
- Possible Guest Lecture by Visiting Researcher

2.2 Research Conference I

April 2018 – Rome (3 Days)

Day 1:

- AM – Network Update
- AM/PM – Update on individual research, Feedback and Discussion
- AM/PM Training on complementary skills:
 - Ethics of writing a research paper
 - Effective dissemination of scientific results to the general public
 - Biometrics in electronic documents

Day 2:

- AM – Update on individual research, Feedback and Discussion
- PM – “Hackathon” event (researchers work in thematic teams to pitch to a panel of experts; research ideas are iterated and refined in real time). Final output will be achieving the solution to a bigger case study by the combination of all the individual case studies. Students discuss chosen topics and propose solutions. Topics: normative issues in mobile biometrics; problems, simplification possibilities, sensors/methods implementation on mobile devices.

Day 3:

- AM – State of the Art update/Industrial Talks
- PM – Possible Guest Lecture by Visiting Researcher

2.3 AMBER Workshop II

November 2018 – Warsaw (3 Days)

Day 1:

- AM – AMBER Network Update
- AM/PM – Update on individual research (ESRs 1 through 5, 45 min each), feedback and discussion
- PM - State of the Art update and Industrial Talks – tentative topics and speakers (30 min lecture + 15 min discussion each):
 - Renewable Biometrics
 - Social Aspects of Biometrics
 - Current Challenges in Iris Recognition
- PM - Possible Guest Lecture by Visiting Researcher

Day 2:

- AM – Update on individual research (ESRs 6 through 10, 45 min each); feedback and discussion
- PM– Complementary Skills Training offered by AMBER members and invited guests (30 min lecture + 15 min discussion each)
 - Industrial Property Rights: Patents and Software Registry (TBD)
 - Ethics in Research on Biometrics
 - Legal Constraints for Biometrics: Regulations and Data Protection

Day 3:

- AM – Update and discussions on Network Activities (AMBER members)
- AM/PM – Possible Guest Lecture by Visiting Researcher
- PM – Complementary Skills Training offered by AMBER members and invited guests (30 min lecture + 15 min discussion each)
 - Work Planning (TBD)
 - Ethics in Computer Science (Claus Vielhauer)

2.4 Research Conference II

April 2019 – Madrid (4 Days)

Day 1:

- AM – Network Update
- AM/PM – Update on individual research (30 minutes each), Feedback and Discussion (15 minutes each)
- PM - Possible Guest Lecture by Visiting Researcher

Day 2:

- AM – Update on individual research (30 minutes each), Feedback and Discussion (15 minutes each)
- PM – Mini research projects:
 - Industrial and/or academic presentations on the basis and requirements of 3 mini-research projects to be solved by ESRs the following days. (30 minutes each)
 - Team building for each of the mini research projects, including:
 - Selection of coordinating ESR
 - Person in charge of:
 - requesting the project (*i.e.*, the client),
 - following the progress (*i.e.*, the mentor), and
 - evaluating the result (*i.e.*, the evaluator).
 - Questions from ESR teams to the Requester (15 minutes each)

Day 3:

- Full-day – Researchers will be grouped in different rooms, with continuous contact with both the mentor and the client. The work will involve problem definition, experimentation, data collection (where necessary) and dissemination.

Day 4:

- AM – Research groups will finish their project and draft results.
- PM – Oral presentation of the results (30 minutes each), and feedback from evaluators (15 minutes each)

2.5 AMBER Workshop III

November 2019 – Magdeburg (4 Days)

Day 1:

- AM/PM – Training on complementary skills:
 - Technical and financial management;
 - Funding of Research;
 - Grant and project proposal submission;
 - How to write a PhD Thesis;
 - Commercial exploitation of IP and business opportunities.

Day 2:

- AM/PM – The world outside of AMBER Network: public and private sectors; the opportunities for developing the professional career. Working in research and academic possibilities; Initial discussions on future initiatives beyond AMBER;
 - industrial partners talks
 - opportunities for developing professional career
 - career services and advice

Day 3-4:

- Mini research-project exercise - Researchers will be grouped with each group led by an ESR supervisor that will coordinate the work of the ESRs. Each team will have an academic mentor. Over a two-day period, groups will intensively work on a range of small- scale biometric problems as defined by industry and academia. The work will involve problem definition, experimentation, data collection (where necessary) and dissemination. It is envisaged that our industrial contacts will make available equipment and data for use in this exercise. A final presentation will allow the evaluation by a panel of experts on each of the projects with a prize awarded to the best group.
- Possible Guest Lecture by Visiting Researcher

2.6 Research Conference III – Open Workshop

April 2020 – Rome (4 Days)

Day 1:

- AM – **Evaluation of the progress of researchers:** individual presentations (30 min each) and discussion (15 min each) – ESRs 1 through 5
- PM – **Evaluation of the progress of researchers:** individual presentations (30 min each) and discussion (15 min each) – ESRs 6 through 10

Day 2:

- AM – **State of the Art Update:** presentations from the industry and the academia

Day 3:

- AM/PM – **Research Exercise:** ESRs will work in groups led by an ESR supervisor and set to work on a range of topics, which will be focused on making the researchers apply their work to factors of entrepreneurship, technology transfer, evaluation of IPR issues, etc.
- PM – Presentation of the results achieved by each of the research projects already finished

Day 4:

- AM – Internal evaluation of AMBER accomplishments
- AM/PM – Further discussions on future initiatives beyond AMBER