Secondment report

Name: ESR3.1 Shayesteh Masoumian
IRP title: **Reliability analysis of SRAM based PUFs in Nano era**
From: IID
To: TUD
Period: Nov 2018 - Dec 2018
Oct 2019 - Dec 2019

Activities during the secondment

- **Scope and objectives.**
  - Analysis of the FinFET based SRAM PUF
  - Develop an analytical model for the FinFET based SRAM PUF
  - Develop knowledge about the FinFET physics and existing models for FinFET transistors
  - Improve soft skills by attending in graduate school courses
- **Activities.**
  - Develop an analytical model for the SRAM PUF static noise margin
  - Perform simulations and analysis of the proposed model
  - Attended in soft skills courses at TU Delft
  - Write an academic paper with the achieved results
- **Main results achieved.**
  - Participation in mandatory courses
  - A submitted paper to ETS 2020: “Modeling Static Noise Margin for FinFET based SRAM PUFs”
- **Next steps.**
  - Modification of the proposed model to cover the extreme cases
- **Optional request for support or a technology/tool available at host:**
  - No request

Self-evaluation

Overall score:5
I consider this secondment successful, with regards to the research objectives achieved, skills developed, supervision quality, diversity of the resources. (Agree = 5 … Disagree = 1)
Optional comments: During my secondment, I had the opportunity to interact with other students and experience the academic environment.

Date of the report approval by the supervisor: 6.1.2020

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