Internship subject Data analysis



Intel is developing game changing EDA (Electronic Design Automation) tools to help to design future microprocessors (like 11th Generation processors & beyond) and the power consumption and temperature. This makes it possible to predict the battery life of laptops 3 years before they are built or to estimate the cost of cooling an Intel-powered data center.

Our tools are deployed in a cloud and many teams at Intel are collaborating to model chips and run many simulations, which generates a great amount of data. Moreover we have access to these data. We thus want to benefit from this exceptional situation by using these data to infer the real needs of our users and also validate next features before they are implemented and released.

Since it was deployed 4 years ago, the advanced modeling techniques offered to users have evolved a lot to meet their requests with an increasing complexity. For example, the size of the models has scaled up by 1000. But the quality of our modeling is not the only strength of our tools, we also provide a collaborative platform and we now want to improve this axis.

The goal of the internship is to use data to better understand how people collaborate and how they could better collaborate. For example, we want to know if a "pull request" à la Github would be useful for them. We can also identify redundancies in the models, which may be a sign that the current modeling is not modular enough: users have to reinvent the same thing many times instead of doing it once and then reusing it.

Appreciated skills

- Programming/scripting
- Data analysis.
- Autonomous individual who can take initiative
- Excellent problem solving skills
- English Language skills is a must & French Language skills would be desired
- Microelectronics are appreciated but not required.

Student qualification

Final year of French Engineering school or Master's degree, preferably with a focus on electronic engineering, data analysis, computer science & related disciplines. This internship could be pursued during a PhD thesis.

Other

Location: Moirans, France (Grenoble area) Starting date: between february and april 2020.

Duration: ~ 6 months