

Vehicle Simulation Internship

Would you like to:

- Dive into the exciting development of digital twins for Formula 1?
- Develop state-of-the-art numerical simulation and optimization tools?
- Make a real impact on our team's success by contributing to the software used to optimize car performance at every race?

Description and Objectives

- Contribute to the development of the numerical and optimization methods
- Optimize the source code for computational efficiency and readability.
- Analyze and improve the numerical accuracy and robustness of the simulation models
- Implement new simulation methodologies and interfaces
- Review, test, and document updates to the source code

What We are Looking For:

- Master's or PhD student in Engineering, Physics, Applied Mathematics, Computer Science, or related field
- Programming experience in C/C++ (Matlab or Python is a plus)
- Knowledge of numerical methods and principles of computational engineering (time integration/differentiation, matrix mathematics, solving nonlinear systems of equations, etc)
- Experience optimizing source code for runtime performance would be advantageous
- Prior understanding of vehicle systems and vehicle dynamics would be beneficial but not required
- Strong English (verbal and written) language skills
- Team player, highly self-motivated, pro-active, creative
- Pragmatic, analytical, and result-oriented with a high attention to detail

Duration

6 month internship beginning March 2025

How to Apply

Send your application documents to:
Scott Bigler
Head of Vehicle Modelling & Simulation
Sauber Motorsport AG
scott.bigler@sauber-group.com