



Vehicle Modelling Internship

Would you like to:

- Dive into the exciting development of digital twins for Formula 1?
- Develop state-of-the-art multiphysics and data-driven models for our Formula 1 digital twin?
- Learn how to regress multivariate models using telemetry data from our Formula 1 cars?

Description and Objectives

- Develop the hybrid multiphysics/data-driven models of our digital twin (e.g., tyres, suspension, power-train, and aerodynamics)
- Implement state-of-the-art simulation and optimization methodologies
- Develop, implement, and employ advanced model correlation algorithms and tools
- Contribute to the development of telemetry data analysis tools
- Review, test, and document new model updates

What We are Looking For:

- Master's or PhD student in Engineering (Mechanical, Nuclear, Robotics, Systems, Control), Physics, or related field.
- Programming experience in C/C++ (Matlab or Python is a plus)
- Strong understanding of physical modelling concepts and principles such as thermodynamics, fluid dynamics, physical mechanics, rigid- and multi-body dynamics, and correlation methods
- Knowledge of numerical modelling and simulation methods
- Prior understanding of vehicle systems and vehicle dynamics would be beneficial
- 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 April/May 2025

How to Apply

Send your application documents to:

Scott Bigler

Head of Vehicle Modelling & Simulation

Sauber Motorsport AG

scott.bigler@sauber-group.com