OPTIMUMG

About Us

Claude Rouelle, internationally acclaimed racecar engineer, began OptimumG in 1997 in his home office with the notion of teaching a new outlook on racecar engineering. His approach emphasizes the importance of vehicle dynamics comprehension, simulation, and data analysis. His goals with this outlook were to qualify and quantify each car parameter's influence on its performance and to be able to make adjustments based on physical realities rather than pure experience or intuition.
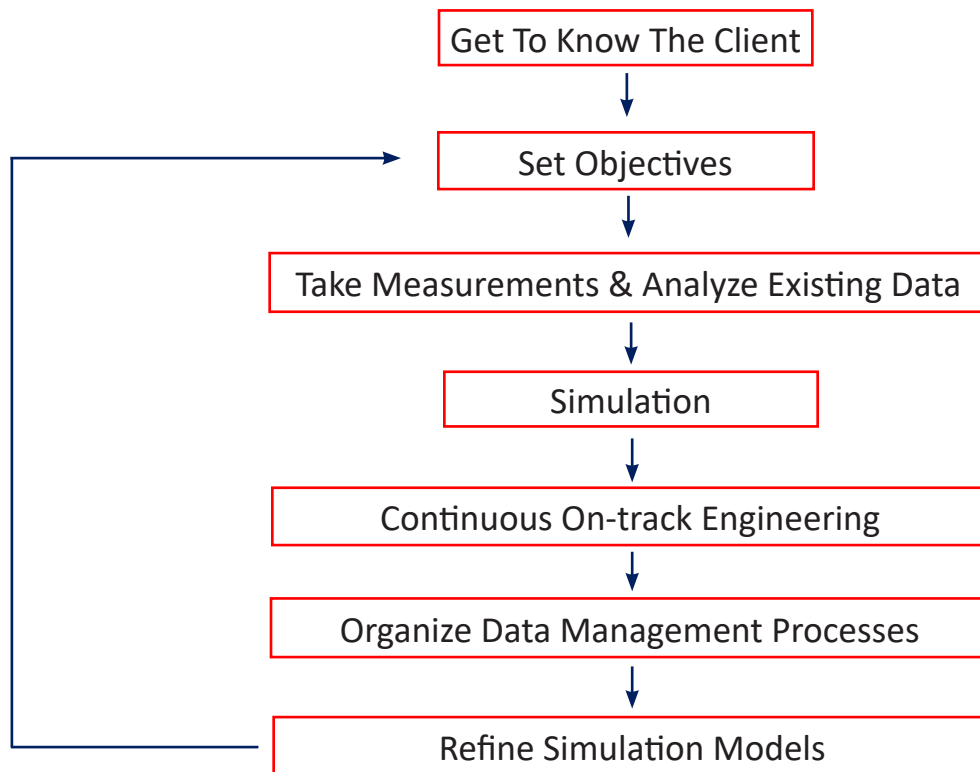
The company began with public seminars taught worldwide and catered to industry experts and students alike. Additional seminars were given to companies such as Ford, GM, Chrysler, Goodyear, Michelin, and Peugeot among others. Just as the seminars evolved, OptimumG expanded and began offering consulting services to help race teams, car and tire manufacturers, and other companies enhance their performance.

Gaining experience in training and consulting, OptimumG broadened its services to include software solutions. Seminar participants were looking for a user-friendly interface that answered their questions about their vehicle's suspension, so OptimumG developed OptimumKinematics—a kinematics software for suspension design and analysis. OptimumG continued developing software so that our products now include OptimumTire, OptimumaLap, and OptimumDynamics.

Our team is comprised of talented engineers from all over the globe with nearly 100 years combined experience.

How we work with our consulting clients

Get To Know The Client
↓
Set Objectives
↓
Take Measurements & Analyze Existing Data
↓
Simulation
↓
Continuous On-track Engineering
↓
Organize Data Management Processes
↓
Refine Simulation Models

We welcome any opportunity to build a new professional and prosperous collaboration with you.

OPTIMUMG
vehicle dynamics solutions

Training Seminars · Software Development · Consulting Services
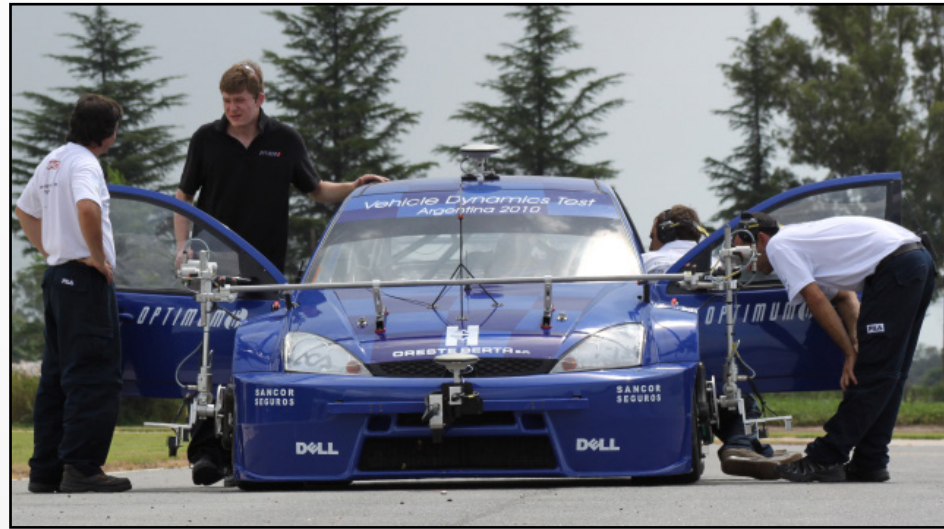
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Consulting

With OptimumG's extensive experience and expertise, car manufacturers and race teams around the world have trusted us to enhance their performance through consulting services tailored to their specific needs. Out services include racecar engineering, data analysis, database management, in-lab and on-track testing, simulation, and much more.

Training

OptimumG offers a variety of training solutions, providing strategies to meet our clients' needs. From the (in)famous **three-day vehicle dynamics seminar** given around the world to specific topics covered in **webinars** such as car setup and design or data analysis, participants have the option to attend a seminar or join via the web. Also offered are 10-day **advanced workshops** or **private, on-site seminars** tailored to topics of special interest to our clients.

" Claude Rouelle brings clarity and definition to areas of relevance with the kind of ease that only a seasoned veteran can possibly do. The fact that he has seen fit to do so is to every engineers advantage, make no mistake. Ignore this opportunity at your peril. "
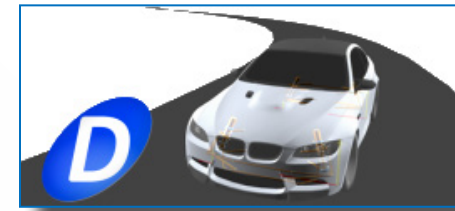
Robert Loaring
I.C.E. Automotive

" One thought that I had after the course... when I was starting off, where was someone like Claude to explain things so clearly, rather than having to learn the hard way? "

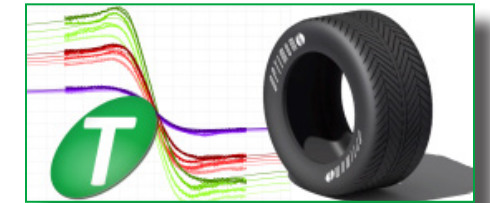**Owen Hayes**
Porche Motorsport

Software

The engineers at OptimumG have developed software programs to help automotive and racecar professionals develop and design their vehicles. Alleviating the hours of sifting through numerous simulation tools, OptimumG helps clients organize data and formula needs by creating custom software programs.
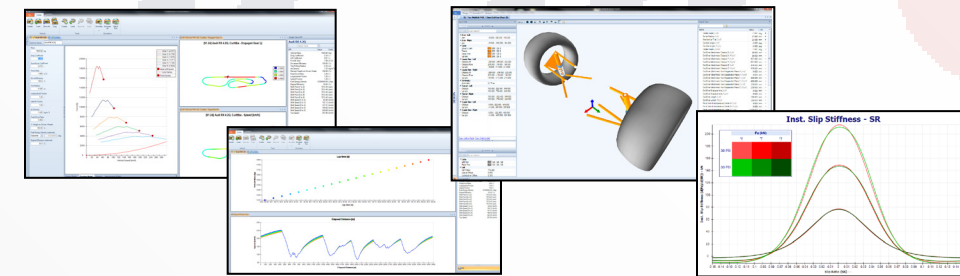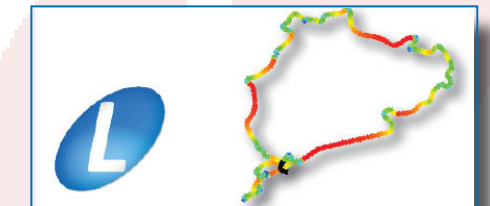

We continuously develop **OptimumDynamics**, a computational vehicle dynamics software that allows users to determine their car design and setup parameter sensitivity and their influence on car behavior and laptime. More than 500 inputs and outputs are visualized in 2D and 3D graphs, tables, and animations.

OptimumTire is a tire data visualization and tire modeling tool that allows for better insight into how a particular tire operates and allows users to run more accurate vehicle simulations. The model fitting procedure is very fast and efficient partially due to the data processing tools incorporated in the software.

OptimumKintematics allows users to visualize suspension designs and easily and intuitively apply motions of roll, pitch, heave, and steering. Users also have the ability to analyze results using 2D and 3D graphs, 3D visualizations of the car in motion, and tables.
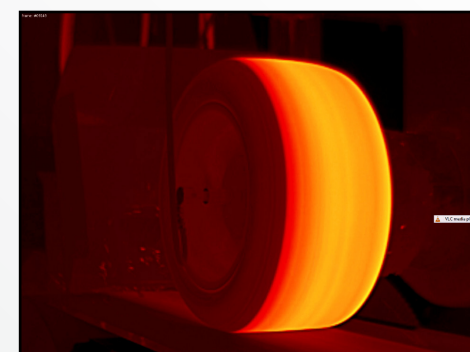
With **OptimumLap** we set out with the notion of creating something useful rather than overly complex. This software provides vehicle dynamic simulation that gives users reasonably accurate and very useful results within minutes. By reducing the vehicle to its most fundamental components, a vehicle can be defined with only 10 parameters.
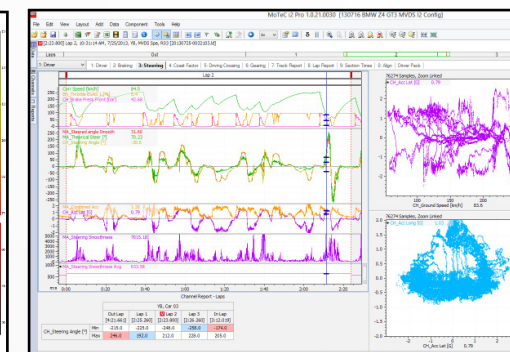

" With OptimumTire, it takes us 3 days to do the fitting and analysis that used to take us 2 weeks. "

Ben Mitchell,
Tire Analysis Engineer
Caterham F1 Team

Development

Analysis

Testing

OptimumG clients include: BTZ, Chrysler, Dunlop, Ford Performance Racing, Goodyear, Jaguar Land Rover, Marc VDS, Michelin Competition, OAK Racing, Peugeot, Rahal Letterman Lanigan Racing, Toyota, and many more.