

Personal Presentation for a cooperation

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2. Experience/Qualifications in automotive development

- working in the automotive industry since **1982** ([Certification](#))
 - interdisciplinary advanced automotive development experience
 - know-how and overview of the latest suspension technologies including advanced driving simulation and optimization
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- Porsche Chassis Design
 - Porsche wheel program (color)
 - Porsche 911 4 WHEEL-DRIVE FORGED WHEEL HUB
 - Porsche 911 RALLY DAMPER STRUTS 4WD
 - Porsche 911 CHASSIS DRAWINGS FOR TYPE Approval ([TÜV - PDF](#))
 - Porsche 928 ABS brake implementation
 - Porsche 911 RS and Turbo-LOOK |part list design|
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- AUDI 4 WHEEL DRIVE REAR AXLE CAST ALUMINIUM cross beam
 - AUDI FRONT AXLE FORGED ALUMINIUM WISHBONE DAMPER AND Aluminum DAMPER MOUNTING
 - AUDI FRONT AXLE ANTI-ROLLBAR
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- BMW 3 SERIES 4 WHEEL-DRIVE
 - BMW FORGED WHEEL HUB
 - BMW BALL JOINT Assembly
 - BMW CAST ALUMINIUM FRONT CROSS BEAM
 - BMW FRONT AXLE ANTI-ROLL BAR
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- Opel 4 WHEEL-DRIVE FRONT-AXLE and rear axle
 - Opel AXLE against OVERBRAKING at HIGH SPEED
 - Opel 4WD hang-on transmission ([cost reduction 230,-DM](#))
 - Opel electric [auxiliary drive 4WD](#)
 - Opel [MULTI-LINK REAR-SUSPENSION Lotus OMEGA](#)
 - Opel DYNAMIC SAFETY REAR AXLE WITH ELECTRIC [4-WHEEL STEERING](#)
 - Opel [4 wheel steering development program](#)
 - Opel FRONT AXLE SLA (short-long arm)
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- MAZDA suspension DEVELOPMENT ([HEIGHT ADJUSTMENT 300mm](#))
 - MAZDA LONDON TAXI ([narrow vehicle](#))
 - MAZDA LEANING CAR - [Suspension layout "tandem seater"](#)
 - MAZDA Phantasiade "[ballrider](#)" electric personal transport
 - MAZDA HQ INTEGRATION of [ERGONOMIC Software ANTHROPOS](#)
 - MAZDA development measuring software connected to TOKYO BOEKI Hardware

Additional suspension projects:

- Design suspension for [ecar-project](#) ([only Internet Explorer](#)) including test driving
- [InoVAN \(BEV\)](#) suspension design and fine tuning

- INOVAN shown as QUICC 2008 at Paris motor show, have a [look](#)
- Amphibian car with retractable suspension
- [Loremo](#) ultralight car suspension, McPherson for ultra-low bonnet
- Loremo show car [Geneva chassis structure](#)
- Loremo carPC and infotainment
- 575kg electric car suspension build with Tier 1 parts
- O2O market need electric commercial vehicles – research and report
- Analyzing technology & player Frontend Modul automotive worldwide
- New Motors how reporting system
- Automotive development process 2018 – Flow and smart production with digital TWIN and Industry 4.0 integrated VR-AR technology by electric vehicle (0 to 500.000units/year).
- HMI Center dash (GM & Model 3) and future instrumentation (Cockpit)
- Traction batterie of future, requirement to Tier1 and needs of OEM
- High integrated Drivetrain saving 35% energy at stop&GO mode (50% cost reduction)
- New Vietnam automobile maker [VinFast](#)

3. Knowledge and tooling's, I use:

- Working with IPG CarMaker IPG since 2002 ([Hockenheim](#))
- Developing new CarMaker module for [energy-fuel calculation](#)
- Suspension measurement's and reports on various cars ([PDF](#))
- Many years of experience with CAD systems like [Catia/SolidWorks](#) and more ([since 1992](#)).
- Working experience with international cultures (11 years at Mazda European R&D Center)
- Restauration EDM Fanuc TapeCut G-Code programming
- Analyzing [Magic Quadrant for Business Intelligence Platforms](#)
- Projected Demand for Lithium to 2030 [simulation with scenarios](#)
- Hyperactive [Data Journalism for automotive analyzing](#)

4. Know-how and experience in fields of automotive development

- Transmission design 4WD (Adam Opel)
- 4Wheel steering (turning circle and ride handling optimization)
- Infinitely variable transmission ([IVT LOREMO+](#))
- Automotive ergonomic and packaging (made a book)
- Electric Hub motor (GM EV2 and [Freedom project](#))
- ICE engines, opposed piston engines (REX) – keep it simple
Thermodynamic layout, simulation and optimization with extensive use of software (Diesel-RK since 2006) [Report](#)
- [Car-men-u](#) online database concept to live ([Layout](#))
- Leading development on [car-men-u automotive design database](#)
- Online questionnaire "[Design Lounge 2005](#)" (with TAN transaction numbers)
- Analyzing, simulating and [optimization of production processes](#) (consideo modeler; [imodeler](#))
- **Electric Vehicle** versus [Petrol Car online Calculator](#)
- Planning Chassis development "[Spyker MPV](#)"
- Production planning "Fisker SURF" ([model base-2-surf](#))
- Development hyper-fast [online visual picture interface](#)
- Everyone drives electric mobiles on smartphone ([running prototype](#))
- Analyzing wiper movements and area with [iPad](#) and software provided by Autodesk
- Analyzing Renault [TWIZY door](#)
- Automotive child seat rating [online](#)

- Forio simulation "[Need of Lithium, Total cost of ownership, model of the Research and Development \(R&D\) process](#)"
- Programming "Bezier curve" interface for online use > [have a look](#) > [##](#)
- Development **VEHICLE_ENGINEERING**plus - [parametric body in white](#) (BIW)
- Advantages, applications, comparison "[3wheeler](#)" to "[FWD-car](#)"
- Suspension research => target 575kg electric vehicle
- Benchmark McPherson FWD and "future" (cost reduction 53€/unit)
- Workshop on [COMSOL multiphysics engineering](#) simulation software; connection to CAD/CAE
- Excellent use of computer coding to do research and analyzing to value systems and products (samples on request)
- The [minicaster](#) – Television signal to go live by satellite
- Making my friend the mayor of Sankt Augustin [private website](#)
- Father of full scale automotive computer [tomography \(CT\)](#)
- Welcome to my 61's birthday ([online](#))

5. Output software/hardware

- 42 automotive patent announcements ([PDF reads](#))
- 32 concept cars ([10 electric-hybrid](#))
- 503 automotive [online presentations](#)
- 4 public artworks | [handshake](#) | [FLEXION](#) | [music instrument](#) |
- 2 online games| [UNTANGLE](#) | [click>2 challenges](#) ([CHINA vers.](#))
- >80.000 automotive design pictures (offline | [example](#) |)
- >35.000 automotive exhibition pictures (online | [one of many](#)|)
- 121 eating [Lunch](#) with friends
- #Click >3# relaxing game Vietnam version [#click>3#](#)

6. Publication

- [myBLOGspot](#)
- <http://issuu.com/d3dhemmer> (restricted publications)
- [online newspapers d3dhemmer](#)

7. Videos:

- Youtube:** [d3dhemmer](#)
- Vimeo :** [d3dhemmer](#) (newest VR-AR development)

8. Crossover technologies and strategies automotive to rotorcraft

- youngcoper [project "NEO"](#) (ongoing pleasure since 10 years)
- [Trijekt](#) engine management systems handling and mapping

1. Art in "hard and soft" (independent projects)

- <http://d3dhemmer.com/coolFLEXION/>
- <http://issuu.com/d3dhemmer/docs/ilight>
- http://d3dhemmer.com/SEXapp_curve_car/
- <http://d3dhemmer.com/6174/>
- http://d3dhemmer.com/dropline_music/
- <http://d3dhemmer.com/untangle3/>
- <http://d3dhemmer.com/ccooler/>
- http://d3dhemmer.com/D3D_pad/
- <https://d3dhemmer.com/sketchfab/>
- The art of Visual story telling [#click#](#)**

2. Miscellaneous

- <http://d3dhemmer.synology.me/d3dhemmer/H-BRS/>
- <http://d3dhemmer.synology.me/d3dhemmer/Tangle/>