Kwai Hau

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| **Home Address:**  16 Hadfield Road  Stanford-le-Hope  Essex  United Kingdom  SS17 0DX | **Date of Birth:** 22/08/1985  **Nationality:** British  **Tel:** +44 (0)1375 642168  **Mob:** +44 (0)7824997435  **E-mail Address:** [khau1985@gmail.com](mailto:khau1985@gmail.com) |

## Profile:

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| **CAD/Software Experience**   * Catia V5 * Teamcentre Engineering (TCe) * IDEAS * DigiBuck/Vismockup * Solid Works, ProEngineer and Unigraphics. * Microsoft Office, Unix, Citrix. | **Design Experience Gained In:**   * Automotive Powertrain * Base Engine Design * Automotive Fuel Systems * Electrical Distribution Systems * Plastic Injection Moulding * Sheet Metal |

Since finishing my design engineering degree at Loughborough University I have gained extensive working design engineering experience, and have been involved in the development of a vast array of components within the automotive and product industries. I have worked, and shown good knowledge, on both 2D and 3D CAD packages including Catia V5, IDEAS, Teamcentre and Vismockup/Digibuck. I have good experience in client and supplier liaison, and also work well within a team environment. I would describe myself as friendly, organised, reliable, and always looking forward to my next challenging and rewarding opportunity to demonstrate myself.

**Work Experience and Projects:**

* **January 2012 – Present: Electrical Harness Design Engineer, Yazaki Systems Technologies GmbH (Catia V5, Teamcentre, Vismockup)**

EDS design and package engineer responsible for block 1 & 2 engine bay and transmission wiring harnesses based onsite at Ford Motor Company, Dunton UK. Tasks included Catia V5 CAD work using solid modelling, surfacing and using the electrical harness tool to create geometric bundles and multi-branchables. Also responsible for supporting package issues, build issues and design reviews onsite, and also at tier 2 suppliers based in Bulgaria, Turkey, Mexico and the US.

* **March 2010 – December 2011\*: Resident Design Engineer, TI Automotive (Catia V5, Teamcentre, Vismockup)**

CAD design engineer for automotive fuel line supplier working on V34x/V36x powertrain commercial vehicle programmes at Dunton, UK. Tasks included Catia V5 CAD work and engineering responsibility on fuel systems and fuel lines. Duties include design engineering, 3D CAD modelling, TeamCentre Engineering, WACTS releasing, residential onsite engineering supplier support, supporting vehicle prototype builds, CAD drawings/drafting for suppliers, working alongside fuel systems engineering to make sure all vehicle aspects were fully integrated, vehicle packaging, organising and driving design reviews, liaising with engineers/managers and component releasing.

* **September 2011 – December 2011\*: Design Engineer, Ford Motor Company (Catia V5, Teamcentre, Vismockup)**

CAD design engineer working on conceptual base engine design for the Viper prototype engine at Dunton, UK. Viper programme work was aimed towards engine block and cylinder cooling development. Tasks included Catia V5 3D solid modelling on prototype base engine components (cylinder blocks, pans, etc), conceptual design, coordinating CAD and design tasks between colleagues, arranging for components to rapid prototyped (parts were primarily machined, fabricated and cast), developing components for testing of cylinder cooling, and modifying/adapting to existing engine components to suit prototype needs.

* **February 2009 – March 2010\*: Resident Design Engineer, CJ Automotive Ltd (Catia V5, IDEAS, Teamcentre, Vismockup)**

CAD design engineer for automotive supplier working on C1 platforms in Cologne, Germany. Tasks included Catia V5 supplier work on cross car-line clutch and brake pedal assemblies. 3D CAD involved translation services between IDEAS and Catia V5 within the Ford system, as well as 2D drafting of pedal assemblies to Ford standards. Duties include 3D CAD modelling using Catia V5 and IDEAS, TeamCentre Engineering, CAD drawings/drafting for suppliers, liaising with engineers/managers/suppliers and 2D/3D CAD releasing.

* **February 2009 – December 2009\*: Resident Design Engineer, CTP Wipac Ltd (Catia V5, Teamcentre, Vismockup)**

CAD design engineer for a supplier working on C344/CD345/C346 platforms in Cologne, Germany. Tasks included Catia V5 designing, vehicle packaging, routing work on wiring harnesses and connections for radio antennas and receivers. As well as 3D CAD work, 2D drafting was required, which included both adaptations to Ford and supplier standards. Duties included design engineering, CAD modelling using Catia V5, TeamCentre Engineering, CAD drawings/drafting for suppliers, liaising with engineers/managers/suppliers (both within UK and Germany), 2D/3D CAD releasing, applying engineering principles and vehicle packaging within the headliner, BIW and IP console.

* **July 2009 – September 2009\*: Design Engineer, Dirty Air Duct, Ford Chassis & Powertrain (Catia V5, Teamcentre, Vismockup)**

CAD designer for B299\_I programme working on the dirty air duct redesign for the India market. Tasks included Catia V5 3D modelling on proposal parts, which could be sent for CFD airflow analysis. Duties include design and engineering, CAD modelling using Catia V5, TeamCentre Engineering, underbody vehicle packaging, liaising with engineers/designers and applying engineering principles.

* **June 2008 – February 2009: Design Engineer, Fuel Systems, Ford Chassis & Powertrain (Catia V5, IDEAS, Teamcentre, Metaphase, Vismockup)**

CAD design engineer for Fuel Systems group working on V347\_8/V362/V363 commercial vehicles in Dunton, UK. Tasks included both Catia V5 and IDEAS work on all aspects of the fuel system including fuel filler pipe, fuel tank, fuel cooler, fuel pump, fuel lines and engine integration. Duties include design and engineering of proposal parts for build phases, CAD modelling using Catia V5 and IDEAS NG, TeamCentre Engineering, underbody vehicle packaging, working with CAE crash group, liaising with engineers/managers/suppliers, and applying engineering principles.

* **June 2006 – August 2007: Mechanical Design Engineer, Xerox Ltd (ProEngineer, IDEAS, SolidWorks, ANSYS)**

Mechanical design engineer working on both exterior PC-ABS plastic components and mechanical moving parts within photocopier machines. Tasks included the design of injection moulded particulate filter housing components. As well as engineering, I also took the initiative to learn about the business aspects of Xerox in order to gain Lean Six Sigma Yellow Belt status. Duties included designing components (both plastic and sheet metal), CAD modelling using ProEngineer and IDEAS, internal machine packaging, CAD drawings/drafting for manufacturers, rapid prototyping, test rig design, problem solving, finite element analysis (FEA), mechanical analysis, material analysis, general engineering.

*\*Dates may overlap due to multiple projects and/or part time roles.*

**Education:**

**BSc (Hons) Design with Engineering Materials (Upper Second, 2:1), Loughborough University**

* Modules included a variety of design engineering topics including Conceptual Design, Technical Design, Mechanical Engineering, Materials Engineering, Manufacturing, CAD, Ergonomics, Maths, Physics and Management.

**Palmers Sixth Form College, Grays, Essex.**

* A Levels: Design & Technology (B), Maths (C), Fine Art (C), Graphic Design (D)
* AS Levels: Applied Mathematics (C)

**Gable Hall School, Corringham, Essex.**

* + 11 G.C.S.E’s at grades C or above including Maths, English and Science.

**Further Skills:**

* A very good knowledge of engineering materials, manufacturing, mechanics and ergonomics.
* A strong IT literacy where I have working knowledge and training of CAD programs and FEA software.
* The adaptability to work as part of a team and by myself.
* The proficiency to deliver strong presentations, drive meetings and communicate clearly.
* Excellent knowledge of how best to design for cost effective manufacture with a range of materials.
* An understanding of plastics, metals, ceramics and composite materials.
* Strong analytical and management skills.

**Further Awards**

* Full clean UK Car and Motorcycle licence.
* Loughborough University Diploma in Industrial Studies (DIS).
* “David Bone Memorial Prize” for effort, achievement, and contributions to my university department.