## Joachim K. Hochwarth

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#### Education

September 1998 – January 2002 University of Minnesota

Department for Aerospace Engineering & Mechanics (AEM)

December 2002 Ph.D. Aerospace Engineering

Minor: Computer & Information Sciences

October 1992 – August 1998 University of Stuttgart – Germany

Diplom-Ingenieur<sup>1</sup> Aeronautical and Astronautical Engineering

September 1994 Pre-Diploma

August 1998 Diploma (with Best Possible Grade)

## **Work Experience**

April 2003 - Present Systems Engineer

GE Aviation Systems (formerly Smiths Aerospace)

February 2002 – April 2003 Systems Engineer

The Titan Corporation · Air Traffic Systems Division (now L-3 Communications)

NASA Langley

Object-oriented design and implementation of a conflict resolution algorithm for the Autonomous Operations Planner (AOP). Work on the conflict detection algorithm and internal integrator of AOP. Functional/integration testing of the AOP framework and subsystems.

September 1998 – January 2002

Research Assistant

Department of Aerospace Engineering & Mechanics

University of Minnesota

Development of the Comprehensive Dynamic Air Traffic System Simulation model ComDATSS

as part of the Ph.D. project.

July 1996 – December 1997 Research Assistant

Institute for Flight Mechanics and Control (IFR)

University of Stuttgart - Germany

Programming of an I/O interface between the  $Matrix_x$  environment and the IFR animation tool AniSim as well as control devices. Implementation of a GUI application to display real-time

results with cockpit instruments.

March 1995 – April 1995 Contractor

DaimlerChrysler Aerospace (EADS) · Lampoldshausen – Germany

Selection and evaluation of parts of the combustion chamber assembly for Ariane V launches

501-503.

October 1994 – February 1995 I

Intern

DaimlerChrysler Aerospace (EADS) · Lampoldshausen – Germany

Work at the test station for combustion chamber parts of the Ariane V Upper Stage Engine

(Aestus). Development of software tools for test analysis and post-processing.

### **Knowledge & Skills**

Computer/Programming Skills

## Modeling/Programming Languages

 $\label{eq:continuous_continuous$ 

& VB6 Macro)

Operating Systems

Unix/Linux · Windows

<sup>&</sup>lt;sup>1</sup> German Equivalent to Master of Science

#### **Software**

 $\label{eq:cational} \begin{array}{ll} \text{Catia} \cdot \text{ClearCase} \; (\text{Rational University Training}) \cdot \text{Dimensions} \cdot \text{DOORS} \cdot \\ \text{Mathematica} \cdot \text{MATLAB/Simulink} \cdot \text{MATLAB} \; \text{Compiler} \cdot \text{MATLAB} \; \text{GUI} \\ (\text{GUIDE}) \cdot \text{Matrix}_x \cdot \text{MS} \; \text{Office} \cdot \text{MS} \; \text{Visio} \cdot \text{Rational Purify} \cdot \text{Rational Rose} \\ \end{array}$ 

More Information at www.hochwarth.com

# Model Construction Operating Experience

 $\label{eq:casting-part} \textbf{Casting} \cdot \textbf{Drilling} \cdot \textbf{Hardening} \cdot \textbf{Lathe Operating} \cdot \textbf{Milling} \cdot \textbf{Part Integration}$  Test Station for Ariane V Upper Stage Engine (Aestus) Combustion Chamber Parts

Languages

Fluent in English & German · Knowledge of French

#### **Publications & Theses**

Comprehensive System-Wide Computer Simulation of Air Traffic Systems Ph.D. Thesis conducted at the AEM · University of Minnesota

A Modularized Approach For Comprehensive Air Traffic System Simulation (AIAA-2000-4478)

Joachim K. Plaettner-Hochwarth · Yiyuan J. Zhao · John E. Robinson III

Published in the Proceedings of the AIAA Guidance  $\cdot$  Navigation & Control Conference 2000  $\cdot$  Denver CO  $\cdot$  07/14/2000 - 07/17/2000

Flight Control and Scheduling for the Lateral Motion of a Tailless F-16 Using Eigenstructure Assignment

Diploma-Thesis conducted at the AEM · University of Minnesota

Influence of a Contortion of the Stationary Blades on the Performance of a Ten Stage Axial Jet Engine High Pressure Compressor Thesis conducted at the Institute for Aviation Propulsion Systems (ILA)

University of Stuttgart - Germany

References

Available Upon Request