

Contact

www.linkedin.com/in/wolfgang-franzen-44718 (LinkedIn)

Top Skills

Channel Management
Supplier Relationship Management
Enterprise Software

Publications

Structure and Motion from Uniform
3D Acceleration

Representing Motion Using
Chronogeneous Transformations

Structure from Chronogeneous
Motion

Structure from Chronogeneous
Motion: A Summary

Natural Representation of Motion in
Space-Time

Wolfgang Franzen

Mathematical Technical Software Generalist | Principal Software
Engineer | Applied Research
Round Rock, Texas, United States

Experience

E2open

Principal Software Engineer
March 2018 - February 2022 (4 years)
Austin, Texas, United States

E2open acquired Entomo at the end of December 2017. Duties included knowledge transfer of Entomo's technology, enhancement and bug fixes to Entomo products and system infrastructure, implementation of a new customer, and rotating system support duties.

Entomo, Inc.

Senior Member of Technical Staff
December 2000 - February 2018 (17 years 3 months)
Bellevue, Washington, United States

Major contributor to an integrated channel management system, and to a supplier relationship management system. Large corporations use our channel management system. Users access the system as a cloud-based (SaaS) service. Customers' and their partners systems integrate to ours through FTP, email, and EDI.

One of the architects of the channel management platform. Made major contributions to the persistence layer, the query layer, and meta-modeling of customer data types. Also implemented the system component to integrate with customers' systems, and do data cleansing and format conversion.

Also, developed system applications. Designed and implemented our Channel Incentive Management (CIM) application. It determines incentives for which a company's partners are eligible. The set of supported incentive programs includes Rebates, SPIFFs, co-op/MDF programs, Ship & Debit programs, and price protection. Some additional applications or system components for which I was the main, major, or early developer:

- Perform sales credit assignment.
- Calculate commission splits.

- Calculate design win commissions.
- Schedule system jobs.
- Used fuzzy matching to dedupe master data and do record linkage.
- Track file arrivals, and check they match the expected frequency of submission.

Developed the “Query Wizard” for our early SRM offering. Users could select the subset of documents to display or export, as well as the fields to display, and the fields on which to filter. The display fields and the filter fields could occur in related documents, and were not required occur in the retrieved document type. The code dynamically generated the SQL query necessary to retrieve the requested data.

Transaga Software, Inc.
Co-founder & System Architect
1998 - 2000 (2 years)
Beaverton, OR

Co-architected and implemented a subsystem critical to the operations of the second largest food distributor in Canada (Sobeys), with 11 billion dollars in annual sales. The software transferred relational data and files between a legacy system at corporate headquarters and roughly 300 grocery stores. In addition, the system provided automated software update.

Tactica Corporation
Senior Member Of Technical Staff
1996 - 1998 (2 years)
Portland, Oregon

Contributed to the development of a process-centric middleware framework that facilitated the rapid development of systems where support for extended or complex ("Off-line") transactions is required. Responsible for formalizing the syntax and semantics of CapreraScript, a Java-like scripting language for specifying business rules. Developed the compiler, interpreter, debugger, and documentation for CapreraScript.

Reusable Solutions, Inc.
Member Of Technical Staff
1992 - 1996 (4 years)
Portland, Oregon

Consultant. Projects involved object modeling, rapid prototyping, developing application user interfaces, mathematical modeling, and optimization. Co-

designed and implemented an application to calculate optimal staffing levels for USAir airport personnel. Generated bid sheets for ticket counter and gate personnel, and aircraft cleaning crews, while meeting contractual requirements. This involved applied queuing theory, and linear programming. Also, implemented part of the user interface for a seat allocation system for USAir. Also, implemented the data entry and analysis portions of a system to audit contributions to a pension trust fund.

University of Southern California
Graduate Research And Teaching Assistant
1984 - 1991 (7 years)
Los Angeles, CA

Computer Composition International
Senior Programmer
1983 - 1984 (1 year)
Chatsworth, CA

Participated in the design of the user interface for a WYSIWYG graphics display terminal. Defined a language to describe scalable fonts, and wrote the associated translator and interpreter. Wrote the device driver for the display terminal.

Mattel Electronics
Member Of Technical Staff
1982 - 1983 (1 year)
Hawthorne, CA

Participated in the design and development of a video game system and the associated custom graphic chip. Suggested graphics hardware changes to improve system performance. Analyzed time, space, and signal-to-noise tradeoffs for various sound and music synthesis algorithms running on a TMS 320. Performed a feasibility study of an auto-stereoscopic 3-D image display technology. Helped define hardware/software requirements for the associated test bed. Developed a mathematical model of the system under study, and determined optimal parameters. Devised novel graphics algorithms in C for the generation of auto-stereoscopic 3-D images.

Transaction Technology, Inc.
Member Of Technical Staff
1979 - 1982 (3 years)
Santa Monica, California, United States

Evaluated vendor programming language and programming environment support. Specified, designed, coded, tested, and documented software development tools such as a dump generator/formatter package, batch spooler, file comparison utility, and ANSI-standard tape labeling. Implemented a multi-link communications protocol in TAL on a TANDEM computer.

Caltech Seismological Laboratory

Senior Research Assistant

1976 - 1979 (3 years)

Pasadena, California, United States

Developed FORTRAN data analysis programs. Collected gravity data in the field. This was a full time position, but with a gap of about a year while getting my M.S. at USC.

University of Southern California

Research And Teaching Assistant

1977 - 1978 (1 year)

Los Angeles, California, United States

Worked with Per Brinch-Hansen, and investigated extending the SOLO operating system to a multi-user operating system. Was also an undergraduate teaching assistant.

Caltech

Research Assistant

1975 - 1975 (less than a year)

Pasadena, California, United States

Developed utilities written in Sequential Pascal to run under the SOLO operating system.

Education

University of Southern California

Ph.D., Computer Vision · (1991)

Caltech

B.S., Mathematics · (1976)