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yogeshhk



Yogesh Kulkarni

16+ years in CAD/Engineering software development. Recently finished PhD in Geometric Modeling. Exploring training opportunities in domains such as Geometric Modeling, CAD, Data & Text Analytics, Natural Language Processing, Machine Learning and Deep Learning.

Education

- 2012 - 17 **PhD Mech Eng**, *College of Engineering Pune*, India.
○ **Research:** Designed and developed novel geometric algorithms for computation of mid-surface, claiming superiority over the existing academic and commercial approaches. Implementation has been done using Autodesk Inventor® APIs, VB.Net, C#.Net, C++.
○ **Publications:** 5 International Journals, 4 International and 1 National Conferences.
- 2007 - 08 **PGD Business Mgmt**, *Symbiosis Inst of Mgmt Studies*, India, **Distinction**.
Courses:
○ Principle and Practices of Management, Statistics & Quantitative Techniques
○ Human Resource Management, Marketing Management, Strategic Management
○ Managerial Economics, Basic Accounting, Organizational Behavior
○ Business Law, Cost & Management Accounting, Production Management
- 1994 - 96 **MS Mech Eng**, *Kansas State University*, USA, **GPA: 4.0/4.0**.
Courses:
○ Intro to Computer Aided Design, Geometric Modeling
○ Finite Element, Adv Finite Element Method
○ Theory of Elasticity, Modeling and Simulation
○ Research: Development of Orthohedral Solid Modeling Kernel
- 1990 - 94 **BE Mech Eng SW**, *College of Engineering Pune*, India, **73.64% Univ Topper**.
Marks:
○ 1st year : 71.58%
○ 2nd year: 75.04% (Rank 1 in Univ of Pune)
○ 3rd year: 74.91% (Rank 4 in Univ of Pune)
○ 4th year: 72.17% (Rank 1 in Univ of Pune)
- 1988 - 90 **12th Science**, *Sir Parshurambhau College*, Pune, India, **87% Distinction**.
- 1983 - 88 **10th**, *Sou Vimlabai Garware High-school*, Pune, India, **88% Distinction**.

Experience

- Oct 2016 - **Consultant-Trainer: Data-Text Analytics**, *Stealth mode startup*, Pune, India.
Present Developing PoCs for Document Similarity, Summarization, IoT Dashboards, etc.
Using Python ecosystem with libraries such as Pandas, BeautifulSoup, Regual Expressions, Scikit Learn, Nltk, Bokeh, Gensim Word2vec, TensorFlow, etc.
- Aug 2016 - **Adjunct Professor/Co-Teacher**, *College of Engineering Pune*, (CoEP), Pune.
Present Subjects: Numerical Methods, Parametric Curves, Inventor Customization.
- Jul 2013 - **Doctoral Research Scholar**, *College of Engineering Pune (CoEP)*, Pune, India.
Sep 2016 Topic: Development of Algorithms for generating connected midsurface using feature information in thin-walled parts. VB.Net, C#. Taught CAD/CAM lab, Industrial Mgmt.
- Dec 2006 - **Software Development Manager, Consumer Products**, *Autodesk*, Pune, India.
Jul 2013 (Hanna Technologies -> Autodesk). Started as Sr Developer and Tech Lead for Inventor Plastics, Fusion, 123D, then Software Development Manager for R&D projects in the consumer domain with responsibilities such as Design Reviews, Project Management, Communication-Coordination, People Management, Internships, Overall Site Management, etc.

- Dec 1998 - **Software Engineer - Advanced**, *Siemens UGS PLM Software*, Pune, India.
- Nov 2006 Geometric->SDRC->EDS->UGS (Siemens). Started as Sr Developer for I-DEAS Simulation project “Midsurface”. Project Manager-Tech Lead for I-DEAS “Shell” Modeling. Tech Lead at Unigraphics for “Part Navigator” and “Trimmed Sheet”. Advanced Topology Foundation (ATF).
- Dec 1997 - **Project Manager**, *Sutra Systems*, Pune, India.
- Nov 1998 Leading a team for projects by Japanese Clients. Worked in Tokyo for couple of months for Matlab-Simulink projects.
- Oct 1996 - **Software Engineer**, *Parametric Technology Corporation*, Boston, USA.
- May 1997 In R & D Mechanical Assemblies Pro/Engineer and Data Transfer module of Pro/Intralink
- Jan 1994 - **Intern Engineer**, *Tata Motors*, Pune, India.
- May 1994
- Testbed for simulating the effect of pre-stretching on accuracy of the cam-boring.
 - Assisted in the development of software for inverse kinematics of a spot welding robot.
- Jun 1992 - **Intern Engineer**, *Tata Motors*, Pune, India.
- Dec 1992 Designed sheet metal dies and fixtures for components.

Publications

- May 2013 **Using Features for generation of Midsurface**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Intl. Conf. on Advances in Mech Eng, **COEP, India**.
- Dec 2013 **Strategies for using feature information in model simplification**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Intl. Conf. on CAE, **IIT Madras**.
- Jan 2014 **Midcurves Generation Algorithm for Thin Polygons**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Natl. Conf. on Emerging Trends in Eng and Science , **Asansol**.
- Dec 2014 **Formulating Midsurface using Shape Transformations of Form Features**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, 5th Intl. and 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR), **IIT Guwahati**.
- May 2015 **Topological Validation of Midsurface Computed from Sheet Metal Part**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, CAD and Applications, **Taylor & Francis**.
- June 2015 **Defeaturing Sheet Metal Part Model based on Feature Information**, *Yogesh Kulkarni, RK Gupta, Anil Sahasrabudhe, Mukund Kale, Alain Bernard*, **CAD Conf London, Taylor & Francis**.
- April 2016 **Leveraging feature information for defeaturing sheet metal feature-based CAD part model**, *Yogesh Kulkarni, RK Gupta, Anil Sahasrabudhe, Mukund Kale, Alain Bernard*, **CAD and Applications, Taylor & Francis**.
- July 2016 **Computation of Midsurface by Feature-based Simplification-Abstraction-Decomposition**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Journal of Computing and Information Science in Engineering, **ASME**.
- July 2016 **Leveraging feature generalization and decomposition to compute a well-connected midsurface**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Eng with Comp, **Springer**.
- January 2017 **Dimension-Reduction Technique for Polygons**, *Yogesh Kulkarni, Anil Sahasrabudhe, Mukund Kale*, Intl. Journal of Computer Aided Engineering and Technology, **Inderscience**.

Honors

Topped Univ of Pune in BE Mechanical Engineering (SW- Co-Op).

Membership of Mensa India (Society for top 2% IQ).

National Merit Scholarship for consecutive 6 years.

Recognized PG Teacher (CAD/CAM) at Univ of Pune.

PMP (Project Management Professional - PMI) Certified.