

DONGJIN HAN

Box D. Brown University, providence, RI 02912 401-863-2177(Lab.) 401-435-6445(Home) han@lems.brown.edu

Education

- **Brown University**—Providence, RI
Expected in Summer 2005
 - Ph. D. in E.E. (Computer Vision and Pattern Recognition)
 - Advisor: David B. Cooper
- **Brown University**—Providence, RI
1995
 - M. Sc. in E.E.
 - Advisor: David B. Cooper
- **Seoul National University**—Seoul, Korea
1990
 - B. Sc. in Electronics Engineering

Experience

- **Brown University**—Providence, RI
Research Assistant: June 2000–present
 - Automatic Vehicle Class Recognition from Video : Automatic Recognition of Vehicle classes like Sedan, SUV, and mini-van from Video Sequences based on (1) probes consisting of local 3D curve-groups which when projected into video frames are features for recognizing vehicle classes in video clips and (2) Bayesian recognition based on class probability densities for groups of 3D distances between pairs of 3D probes.
 - Sherd Assembly: Automatic Assembly of Virtual Pots from 3D Measurements of their Fragments
 - 3D mesh Surface smoothing(hole filling) using neighborhood and differential equation
- **Korea Military Academy**—Seoul, Korea
Lecturer, Researcher, First Lieutenant: April 1996– July 1999
 - Researching C4I: Communications Computers Command Control and Information
 - Teaching Cadets: subjects on C4I, Electricity and Magnetism
- **Samsung Advanced Institute of Technology**—Kiheung, Korea
Researcher: March 1995– April 1996
 - Content based image compression
 - MPEG-4 design : Developing MPEG-4 CODEC for MPEG-4 standardization
- **Brown University**—Providence, RI
Research Assistant: June 1991– January 1995
 - Automatic Road Tracking from Satellite image using dynamic programming

- Statistical MRF(Markov Random Field) edge detection
- Automatic Artery Finding in Medical Angiogram: Using dynamic programming, automatically track the artery.

Publication

- Dongjin Han, D.B. Cooper "Vehicle Class Recognition from Video" In Preparation to IEEE transactions on Pattern Analysis and Machine Intelligence.
- Dongjin Han, Matthew Leotta, Joseph J. Mundy, David B. Cooper "Vehicle Class Recognition from Video based on 3D Curve Probes", VS-PETS 2005
- D.B. Cooper, A Willis, Dongjin Han *et. al.* "Bayesian pot-assembly from fragments as problems in perceptual-grouping and geometric-learning", in Proceedings of IEEE Int. Conf. on Pattern Recognition, Quebec City, Canada, 2002.
- D.B. Cooper, A Willis, Dongjin Han *et. al.* "Assembling virtual pots from 3D measurements of their fragments", in Proceedings of ACM Int. Symp. on Virtual Reality, Archaeology, and Cultural Heritage (VAST 2001), Greece, 2001.
- Boem-Woo Park, Dongjin Han, Young-Yoon Choi "Short distance radio LAN protocol embodiment which uses military radio sets" 2nd communication/electronic section scientific conference pp.582-590 1998.9.25

Skills

- **Operating Systems:** Linux, X, UNIX , MS Windows
- **Computer Languages:**
 - C, C++, VC, HTML, Java, L^AT_EX, UNIX Shells
 - Matlab, Maple
- **Tools:**
 - Adobe Photoshop, Adobe Illustrator
 - Shapegrabber laser scanner, InnovMetric polyworks

Reference

- **David B. Cooper**—Professor
Brown University
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- **Kyung-Suk Kim**—Professor
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