

HYUNTAE NA

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EDUCATION

Aug. 2007 - Present	Iowa State University <i>Ph.D. in Computer Science</i> <ul style="list-style-type: none">• Current cumulated GPA: 3.67/4.0	Ames, Iowa, USA
May. 1999 - Feb. 2002	Hanyang University <i>M.S. in Computer Science & Engineering</i> <ul style="list-style-type: none">• GPA: 3.88/4.0• Publications: 1 International Conference, 1 Domestic Journal, 3 Domestic Conferences• Thesis: Object Tracking Algorithm using Deformed Template and Level-Set Theory	Seoul, Korea
May. 1995 - Feb. 1999	Hanyang University <i>B.S. in Computer Science & Engineering</i> <ul style="list-style-type: none">• Major GPA: 3.69/4.0 Upper GPA: 3.48/4.0 Overall GPA: 3.27/4.0• Honors: Scholarship Granted, Dept. of Computer Science & Engineering (1995 and 1997)• Thesis: Image format by using vector information	Ansan, Korea

TEACHING ASSISTANT

Mar. 2000 – Aug. 2000	Hanyang University	Ansan, Korea
Mar. 1999 – Aug. 1999	<i>Teaching Assistant</i> <ul style="list-style-type: none">• Taught UNIX commands and programs to 20-30 students by creating, supervising and scoring exams, and giving grades	

PUBLICATIONS

International Conference

- Jong Ryul Kim, Hyun Tae Na, Young Shik Moon, "A Robust Algorithm for Tracking Non-rigid Objects," ITC-CSCC, pp. 138-141, Jul. 2002.

Domestic Journal

- Jong Ryul Kim, Hyun Tae Na, Young Shik Moon, "A Robust Algorithm for Tracking Non-rigid Objects Using Deformed Template and Level-Set Theory", Journal of IEEK, 2003, 5.

Domestic Conference

- Jong Ryul Kim, Hyun Tae Na, Young Shik Moon, "Object Tracking using Parametric Motion Model and Edge Information," Workshop of SIG on Computer Vision and Pattern Recognition, Nov. 2002.
- Hyun Tae Na, Young Shik Moon, "Object tracking using Template Deformation and Level-Set Theory," Workshop of SIG on Computer Vision and Pattern Recognition, Nov. 2001.
- Jong Ryul Kim, Hyun Tae Na, Jung-Sun Kim, Young Shik Moon, "Implementation and Analysis of Parallel BMA on Workstation Cluster Environment," Workshop of SIG, 1999.

PROJECTS

2008 - Present	Longest Common Subcurve <i>Research Assistant</i> <ul style="list-style-type: none">• Researching an algorithm to find Longest Common Subcurve in 2D and 3D space by using Dynamic Programming.
2007	Virtual Colonoscopy <ul style="list-style-type: none">• Researching informative frame detection to improve its time complexity.
2004	Silver Mate <ul style="list-style-type: none">• Consulted research direction for object tracking, especially human body shape, by helping MS research assistant correct research direction by conveying my knowledge and experiences of object tracking, and by recommending another approach, which was ultimately accepted by RA
1999 - 2002	“Wireless Multimedia Technology”, from BK21 <i>Research Assistant</i> <ul style="list-style-type: none">• Developed tracking and extracting accurate shape of object against occlusion, background variation and object flexibility
2000 - 2001	“Researching and developing technology of content based detection and analysis for animation video”, from KMEDIA <i>Research Assistant</i> <ul style="list-style-type: none">• Developed tracking object against occlusion, background variation and object flexibility

PROJECTS (cont.)

- 1999 **Research for visualizing efficiency of parallel system, from Ministry of Science & Technology**
Research Assistant
- Implemented and optimized motion tracking algorithms requiring heavy computations by using MPI (Message Passing Interface) library, and analyzed those performances

WORK EXPERIENCE

- Feb. 2007 – July. 2007 **Mobinetpia Co.,Ltd.** **Seoul, Korea**
Development Manager
- Managed and developed Active Photo, image editing tool
 - Developed program structure extendable to manage various kinds of operations for drawing.
 - Analyzed using patterns of other tools and designed friendly user interface.
 - Implemented and improved several image processing algorithms and image processing filters, to improve quality and efficiency.
- Dec. 2001 – Apr. 2006 **FunctionBay, Inc** **Seoul, Korea**
Research engineer as a Technical Research Personnel (Military Service)
- Developed undo manager, a function that manages undo/redo operation as in word processors
 - Developed algorithms by surveying and analyzing methods to handle undo/redo operation, designed and implemented basis of new undo managing algorithms, and extended functionality of undo manager to accept requirements to apply company program
 - Managed overall processes of adapting company program to undo manager by educating developers on the foundation using of undo manager, supervising processes of converting company program to utilize undo manager, and standardizing the processes by analyzing and solving the problems occurred during the adaptation
 - Developed expression handler, which handles functionally extended expressions to compute value and translate to other formats accepted by other modules, by surveying features of various compiler-compilers, analyzing requirements from coworkers, and implementing expression handler to be easily extended to support further requirements
 - Designed appropriate algorithm and developed database management modules to solve a bottleneck in handling company's database information
 - Analyzed and redesigned internal core architecture to upgrade GUI, using another company's GUI modules
 - Developed, updated, and documented parts of several toolkits and modules to extend functionality of company product
- May. 1996 – Aug. 1996 **Virtual Dynamics Lab. in Hanyang University** **Ansan, Korea**
Research Assistant
- For Simulation Engine for Machine Dynamics, developed expression handler that computes value or translates to other formats accepted by main module of the simulation engine

ACTIVITIES

- 2000 - 2007 **The Institute of Electronics Engineering of Korea**
Member of the academic institute
- 2003 - 2005 **“Developers” Study Group of Programmers**
Member
- Led sub-groups studying Design Pattern
 - Led sub-groups studying TDD (Test Driven Development)
- 1995 - 1999 **“0&1” Academic Society**
Member
- Participated in programming conference as sophomore class representative by creating a game program by using OOP and layered architecture (separating algorithms and user-interface)
- 1995 - 1999 **“Pung-Ju” Student Society**
Member
- Helped students adapt to university life by teaching ways to preparing reports and materials for classes, and by matching freshmen and seniors, individually for mentoring purposes

SKILLS & NOTABLES

- Design Pattern, Refactoring, and TDD (Test Driven Development)
- Available using C/C++, ActiveX, C#, Java, ML, Matlab, Flex-Bison, and OpenGL
- Geodesic Active Contour, Level-Set, Deformable Template, Parametric Motion Estimation, Maximum-Likelihood, Recovery of Camera Lens Distortion, Avoidance of Incoherence by Turkey-Weight Function, Course-to-Fine, Multi-resolution, Watershed, SVM(Support Vector Machine).