

Hyun Jin Son

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EDUCATION

Auburn University; Auburn, AL | *PhD in Mathematics*; May 2018

Clemson University; Clemson, SC | *Master of Science in Mathematics*; December 2007

Ajou University; Suwon, South Korea | *Master of Science in Mathematics*; May 2001

Ajou University; Suwon, South Korea | *Bachelor of Science in Mathematics*; May 1998

- 4 times scholarship for outstanding grade

EXPERIENCE

Southern Wesleyan University; Assistant professor in Mathematics; August 2018 – Present

- Math 1024 (Algebra and Trigonometry)
- Math 1053 Online (Quantitative Reasoning)
- Math 2504 (Calculus I)
- Math 2514 (Calculus II)
- Math 3524 (Calculus III)
- Math 4003 (Linear Algebra)
- Math 4303 (Historical, Philosophical and Ethical Development of Mathematics)
- Math 4403 (Abstract Algebra)
- Math 4423 (Probability Theory)
- Math 4553 (Advanced Calculus I)
- Math 4563 (Advanced Calculus II)

Auburn University; Auburn, AL | *GTA as an instructor of record*; August 2012 – May 2018

- Math 2650 (Linear Differential Equations)
- Math 2630 (Calculus III)
- Math 1680 (Business Calculus I).
- Math 1690 (Business Calculus II).
- Math 1610 (Calculus I)
- Math 1150 (Pre-Calculus Algebra and Trigonometry)
- Math 1130 (Pre-calculus and Trigonometry)
- Math 1120 (Pre-Calculus).
- Math 1000 (College algebra).

Auburn University; Auburn, AL | *Athlete Tutor*; August 2011 – July 2012

- Tutored athlete students one-on-one for Math 1610, Math 1150, Math 1680

Clemson University; Clemson, SC | *Teaching Assistant*; January 2005 - December 2007

- Assisted and graded calculus class
- Tutored American and Korean students one-on-one

Kaplan; Los Angeles, CA | *Language Study*; March 2004 - August 2005

- Learned communication skills (writing, reading and listening)
- Studied GRE and TOEFL

Military; Incheon, South Korea | *Sergeant*; July 2001 - September 2003

- Manage the record of soldier and select soldiers using military software.

Ajou University; Suwon, South Korea | *Teaching Assistant*; January 1998 - May 2001

- Taught and provided assistance in lab class, C language, SAS, MATHEMATICA, MATLAB
- Taught and provided assistance in Calculus class

Ajou University; Suwon, South Korea | *Manager*; January 1998 - May 2001

- Managed computer lab
- Repaired computers; Notebook, Desktop and UNIX server
- Taught students using computer with many kinds of Windows applications
- Managed Unix/ Linux Server, Network Manage, Setup program/ OS

ACTIVITIES and MEMBERSHIP

- Nemorami (program DOS based applications): March 1995 – May 2001
- Field (Mathematics study group) : August 1998 - May 2001
- AMS (American Mathematical Society); August 2005 – May 2018
- SIAM (Society for Industrial and Applied Mathematics); August 2005 - Presents

KEY SKILLS

- **Computer**: Python(Intermediate), C Language (Intermediate), HTML (Expert), Repairing computer (Desktop and Notebook (expert)), proficient in Microsoft Office (OneNote, Word, Excel, PowerPoint), DB (Intermediate)
- **Mathematic Programs**: Maple (Intermediate), (MATLAB (Expert), FORTRAN (Intermediate), SAS (Intermediate), MAPLE(Intermediate)
- **Languages**: *English* (advanced), *Korean* (fluent)

RESEARCH

- Dawit Denu, Hyun J. Son, Analysis and Optimal control of Zika Virus Stochastic Model, 2018 (In progress)
- Dawit Denu, Hyun J. Son, Analysis and Optimal control of Zika Virus Deterministic model, 2018 (Submitted)
- Hyun J. Son, Analysis and Optimal control of deterministic Vector-Borne diseases model, 2018 Dissertation.
- Kbenesh Blayneh,, Hyun J. Son, The optimal control of vector-borne disease and analysis of the periodic vector-borne disease model, 2017 (In progress)
- Hyun J. Son, Yanzhao Cao, Probabilistic graphical modeling with Stochastic partial differential equation of a random laminar wake past a circular cylinder, 2016 (In progress)
- Mitchell Pricea, Dawit Denu, Hyun J. Son, Eze R. Nwaezed, Trace of A Point on A Rolling Circle along A Smooth Curve, American Journal of Undergraduate Research(AJUR), 2016(Submitted)
- J. Borggaard, T. Iliescu, H. Lee, J.P. Roop and H. Son, A Two-level Discretization Method for the Smagorinsky Model, SIAM multiscale modeling and simulation 7(2), 2008, pp. 599-621
- J. Borggaard, T. Iliescu, H. Lee, J.P. Roop and H. Son, Numerical Approximation of the Smagorinsky model by a two-level method, PAMM · Proc. Appl. Math. Mech. 7, 2007, pp. 1101005–1101006
- Hyun J. Son, Hyung-Chun Lee, Study on a fictitious domain method for elliptic problems, Ajou University, 2001

PRESENTATION

- **JMM 2018 at San Diego**
- **2018 9th SIAM conference at University of South Carolina**

CERTIFICATE and OUTREACH

- Corner Stone 2018, Southern Wesleyan University
- Event coordinator 2018, AMPD (Auburn Mathematical Puzzle Challenge)
- Event Coordinator 2016, KSEA National Math Competition
- Excellence Teaching 2015, Department of Mathematics and Statistics, Auburn University
- Event Coordinator 2015, Regional Science Olympiad, Auburn University
- Preparing Future Faculty 2014-2015, Auburn University
- The Enhancement of Teaching and Learning, 2014, Auburn University

AWARD

- Travel award, 2017 , Graduate School, Auburn University
- Research Scholarship, 2014, Graduate School, Auburn University.
- Travel award, 2014, 2016 & 2017 , Department of Mathematics and Statistics, Auburn University
- Dr. Kevin Doheny Annual Graduate Fellowship, 2014, Department of Mathematics and Statistics, Auburn University
- 4 times Scholarship for outstanding grade, 1995-1998, Ajou University

REFERENCES

- Dr. Yanzhao Cao
 - Professor
 - yzc0009@auburn.edu, (334) 844-6576
- Dr. Hans-Werner Van Wyk
 - Assistant Professor
 - hzv0008@auburn.edu, (334) 844-6575
- Dr. Narendra Kumar Govil
 - Professor and Associate Chair
 - govilnk@auburn.edu, (334) 844-6558
- Dr. Greg A. Harris
 - Associate Professor
 - harriga@auburn.edu