See-Hak Seong

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EDUCATION

University of Illinois at Chicago, Illinois, USA	August 2016 - Present
Ph.D. Candidate, Pure Mathematics	June 2017 - Present
Advisor : Izzet Coskun	

Seoul National University, Republic of Korea	March 2009 - December 2010
B.S. in Mathematics	& March 2013 - February 2015

Seoul Science High School, Republic of Korea	March 2007 - February 2009

INTERESTS

I am interested in Algebraic Geometry, especially with Hilbert schemes and intersection theories, and some combinatorial commutative algebra.

AWARDS AND SCHOLARSHIP

Merit Awards, University of Illinois at Chicago	September 2016
National Scholarship for Science and Engineering	Spring 2013 - Fall 2014
Eminence Scholarship, Seoul National University	Spring 2010 - Fall 2010
Superior Academic Performance, Seoul National University	Fall 2009
Excellence Award, 22nd Final Korean Mathematical Olympiad	2009
Silver Prize, 22nd Korean Mathematical Olympiad (KMO)	2008
Silver Prize, 21st Korean Mathematical Olympiad (KMO)	2007

PUBLICATIONS

1. S. Seong, *Connected components in the Hilbert scheme of hypersurfaces in Grassmannian*, arXiv:1907.06569, Jul 2019.
   (accepted for publication in *Communications in Algebra*)

2. S. Seong, Nef cone of the Hilbert scheme of hypersurfaces in Grassmannian, in preparation

TEACHING EXPERIENCE

Teaching Assistant   August 2016 - Present
University of Illinois at Chicago, Illinois, USA

- Fall 2019 : Teaching and Presentations of Mathematics (Math 589), TA Coordinator
- Spring 2019 : Applied Linear Algebra (Math 310), TA tutor
- Fall 2018 : Calculus I (Math 180)
- Summer 2018 : Calculus II (Math 181)
- Spring 2018 : Calculus III (Math 210)

- Fall 2017 : Calculus I (Math 180)
- Spring 2017 : Calculus II (Math 181)
- Fall 2016 : Calculus III (Math 210)

Teaching Assistant   September 2015 - June 2016
Seoul National University, Republic of Korea
- Spring 2016 : Calculus I (033.001)
- Fall 2015 : Calculus II (033.002)

SEMINAR TALKS	**Graduate Algebraic Geometry Seminar,** UIC	Nov 2019

- Hilbert scheme of curves in $\mathbb{P}^3$

Graduate Algebraic Geometry Seminar, UIC   Feb 2019
- Introduction to Hilbert Scheme of Points on Affine space

Graduate Algebraic Geometry Seminar, UIC   Oct 2018
- Rational curves on general type hypersurfaces

Graduate Algebraic Geometry Seminar, UIC   Mar 2018
- Chern Classes and Splitting Lemma

Graduate Algebraic Geometry Seminar, UIC   Oct 2017
- Introduction to Riemann-Roch Theorem

Geometry and Topology graduate day II at UIC, UIC   Apr 2017
- Introduction to Resolution of Singularities : Blow up

Geometry and Topology graduate day at UIC, UIC   Nov 2016
- Non-Parallelizable Real Projective Space and Stifel-Whitney Classes

CONFERENCES **Attendee,** University of Illinois at Chicago, IL, USA   March 2019
- Midwest Algebraic Geometry Graduate Conference

Attendee, University of Illinois at Chicago, IL, USA   May 2018
- Midwest Algebraic Geometry Graduate Conference

Attendee, University of Illinois at Chicago, IL, USA   March 2018
- Algebraic Geometry and its Broader Implications

Attendee, Allerton Center, IL, USA   May 2017
- Geometry and Physics of Augmented Bundles