

## Hyuk Jun Kweon

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| CONTACT INFORMATION | 606 Boyd Research and Education Center<br>Athens, GA 30602, USA  | +1-857-999-1251<br>kweon@uga.edu               |
| EMPLOYMENT          | <b>University of Georgia</b> , Athens, GA  |  |
|                     | Limited Term Assistant Professor   | Jan. 2023 - Current                            |
|                     | <b>Massachusetts Institute of Technology</b> , Cambridge, MA   |  |
|                     | Research Specialist Limited (One-year bridge postdoc)  | Aug. 2021 - Jul. 2022                          |
|                     | <b>National Institute for Mathematical Sciences</b> , Daejeon, South Korea   |  |
|                     | <b>Technical Research Personnel</b>  | Mar. 2015 - Apr. 2018                          |
|                     | <ul style="list-style-type: none"><li>• Alternative military service</li><li>• Managing a SageMath notebook server</li><li>• Providing mathematical outreach programs</li></ul>      |  |
| EDUCATION           | <b>Massachusetts Institute of Technology</b> , Cambridge, MA   |  |
|                     | Ph.D. in Mathematics   | Sep. 2018 - Jun. 2021<br>Sep. 2012 - Aug. 2014 |
|                     | Advisor: Bjorn Poonen<br>(Leave of absence is due to compulsory military service)  |  |
|                     | <b>Pohang University of Science and Technology</b> , Pohang, South Korea   |  |
|                     | B.S. in Mathematics<br>B.S. in Computer Science and Engineering  | Mar. 2008 - Feb. 2012                          |
|                     | <ul style="list-style-type: none"><li>• Double Major</li><li>• Summa Cum Laude</li></ul>   |  |
| PUBLICATION         | Maximum Overlap Area of Several Convex Polygons Under Translation (with Honglin Zhu), <i>The 36th Canadian Conference on Computational Geometry (CCCG 2024)</i>                      |  |
|                     | Maximum overlap area of a convex polyhedron and a convex polygon under translation (with Honglin Zhu), <i>The 39th International Symposium on Computational Geometry (SoCG 2023)</i> |  |
|                     | Bounds on the Torsion Subgroup Schemes of Néron-Severi Group Schemes, <i>Advances in Mathematics</i> 409 (2022): 108687.   |  |
|                     | Bounds on the Torsion Subgroups of Néron-Severi Groups, <i>Trans. Amer. Math. Soc.</i> 374 (2021), pp. 351-365.  |  |
|                     | Overlap of convex polytopes under rigid motion (with Hee-Kap Ahn; Siu-Wing Cheng and Juyoung Yon), <i>Computational Geometry</i> 47, no. 1 (2014): 15-24                             |  |
| AWARDS AND HONORS   | AMS-Simons Travel Grants   | July. 2023 - Jun. 2025                         |
|                     | Scholarship for Doctoral Study, Samsung Foundation   | Sep. 2012 - Jun. 2021                          |
|                     | Scholarship, STX Foundation  | Mar. 2011 - Feb. 2012                          |
|                     | Governmental Scholarship, Korea Student Aid Foundation   | Mar. 2008 - Feb. 2011                          |
|                     | 6th Place, ACM-ICPC Korea Regional Programming Contest   | Nov. 2010                                      |

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|                  | 4th Place, ACM-ICPC Korea Regional Programming Contest  | Nov. 2009             |
|                  | 5th Place, ACM-ICPC Korea Regional Programming Contest  | Nov. 2008             |
| TEACHING         | <b>Complex Variables (MATH4150)</b><br>Lecturer, University of Georgia                                    | Aug. 2024 - Dec. 2024 |
|                  | <b>Precalculus (MATH1113)</b><br>Lecturer, University of Georgia  | Aug. 2024 - Dec. 2024 |
|                  | <b>Calculus II for Science and Engineering (MATH2260)</b><br>Lecturer, University of Georgia              | Jan. 2024 - Apr. 2024 |
|                  | <b>Calculus I for Science and Engineering (MATH2250)</b><br>Lecturer, University of Georgia               | Aug. 2022 - Dec. 2023 |
|                  | <b>Precalculus (MATH1113)</b><br>Lecturer, University of Georgia  | Jan. 2022 - May. 2022 |
|                  | <b>Multivariable Calculus (18.02)</b><br>Recitation Leader, Massachusetts Institute of Technology         | Feb. 2021 - May. 2021 |
|                  | <b>Calculus (18.01A/18.02A)</b><br>Recitation Leader, Massachusetts Institute of Technology               | Sep. 2020 - Dec. 2020 |
|                  | <b>Calculus of Several Variables (18.022)</b><br>Recitation Leader, Massachusetts Institute of Technology | Sep. 2019 - Dec. 2019 |
|                  | <b>Differential Equations (MATH200)</b><br>Recitation Leader, Pohang University of Science and Technology | Mar. 2012 - Jun. 2012 |
|                  | <b>Complex Variables (MATH310)</b><br>Recitation Leader, Pohang University of Science and Technology      | Aug. 2011 - Dec. 2011 |
| RESEARCH TALKS   | Canadian Conference on Computational Geometry, Brock University   | Jul. 2024             |
|                  | Palmetto Number Theory Series XXXVI, Clemson University   | Oct. 2023             |
|                  | Number Theory Seminar, University of Georgia  | Apr. 2023             |
|                  | Southern Regional Number Theory Conference, Louisiana State University                                    | Mar. 2023             |
|                  | Number Theory Seminar, University of Georgia  | Aug. 2022             |
|                  | Korea Institute for Advanced Study  | Oct. 2022             |
|                  | POSTECH-PMI Number Theory Seminar, POSTECH  | Apr. 2022             |
|                  | Johns Hopkins Junior Number Theory Days, Johns Hopkins University   | Dec. 2021             |
|                  | 2021 Korean Mathematical Society Annual Meeting   | Oct. 2021             |
|                  | Ohio State Number Theory Seminar, Ohio State University   | Mar. 2021             |
|                  | AMS Special Session, Spring Eastern Sectional Meeting, Brown University                                   | Mar. 2021             |
|                  | Binghamton Arithmetic Seminar, Binghamton University  | Mar. 2021             |
|                  | Korea Institute for Advanced Study  | Jan. 2020             |
| EXPOSITORY TALKS | <b>Proof of the amplification principle 2</b><br>STAGE, Massachusetts Institute of Technology             | May. 2022             |
|                  | <b>Alterations</b><br>STAGE, Massachusetts Institute of Technology  | Nov. 2020             |

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|                     | <b>Formal Groups as Functors</b><br>STAGE, Massachusetts Institute of Technology  | Sep. 2019   |
|                     | <b>Division by 2 on Hyperelliptic Curves</b><br>Preprint Seminar, Massachusetts Institute of Technology                           | Dec. 2018   |
|                     | <b>Review of Étale Cohomology</b><br>STAGE, Massachusetts Institute of Technology   | Sep. 2018   |
|                     | <b>On the Fary-Milnor theorem, following the existing literatures</b><br>SCV Seminar, Pohang University of Science and Technology | Nov. 2010   |
| ACADEMIC<br>SERVICE | Co-organizer of STAGE<br>(Seminar on Topics in Arithmetic, Geometry, Etc.), MIT   | Spring 2022 |
|                     | Co-organizer of STAGE<br>(Seminar on Topics in Arithmetic, Geometry, Etc.), MIT   | Fall 2021   |
|                     | Co-organizer of STAGE<br>(Seminar on Topics in Arithmetic, Geometry, Etc.), MIT   | Fall 2020   |