

CURRICULUM VITAE

Aviv Gibali Ph.D.

Applied Mathematics Department,
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HIT - Holon Institute of Technology

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1. Academic Education

Ph.D. 2012: Department of Mathematics, The Technion - Israel Institute of Technology, Haifa, Israel.

Dissertation: Algorithms for Solving Variational Inequalities and Applications.
Advisors: Professors Simeon Reich and Yair Censor.

M.Sc. 2008: Summa Cum Laude in Mathematics, Department of Mathematics, University of Haifa, Haifa, Israel.

Thesis: Investigations of Iterative Algorithms for Solving the Variational Inequality Problem.
Advisor: Professor Yair Censor.

B.Sc. 2005: Summa Cum Laude in Mathematics, Department of Mathematics, University of Haifa, Haifa, Israel.

2. Academic Employment

10/2023 – Present: Head of Applied Mathematics Department, HIT - Holon Institute of Technology, Israel.

10/2020 – 9/23: Head of the Mathematics Department, ORT Braude College of Engineering, Karmiel, Israel.

10/2018 - Present: Associate Professor at the Mathematics Department, ORT Braude College of Engineering, Karmiel, Israel.

2017 - Present: Scientific adviser, Fraunhofer Institute for Industrial Mathematics (ITWM), Kaiserslautern, Germany.

2014 – 10/2018: Senior lecturer at the Mathematics Department, ORT Braude College of Engineering, Karmiel, Israel.

2013 - Present: Research associate at the Center for Computational Mathematics and Scientific Computation (CCMSC), University of Haifa, Haifa, Israel.

2012 - 2014: Researcher at the Optimization Department, Fraunhofer Institute for Industrial Mathematics (ITWM), Kaiserslautern, Germany.

Postdoc fellowship at the Department of Mathematics at Kaiserslautern University of Technology, Kaiserslautern, Germany.

3. Professional and Research Experience

10/2023 – Present: Associate Professor at Applied Mathematics Department, HIT - Holon Institute of Technology, Israel.

10/2018 - 9/23: Associate Professor at the Mathematics Department, ORT Braude College of Engineering, Karmiel, Israel.

2014 – 10/2018: Senior lecturer at the Mathematics Department, ORT Braude of Engineering, Karmiel, Israel.

2013 - Present: Research associate at the Center for Computational Mathematics and Scientific Computation (CCMSC), University of Haifa, Haifa, Israel.

2012 - 2014: Researcher at the Optimization Department, Fraunhofer Institute for Industrial Mathematics (ITWM), Kaiserslautern, Germany.

Postdoc fellowship at the Department of Mathematics at the Kaiserslautern University of Technology, Kaiserslautern, Germany.

4. Teaching Experience

ORT Braude College: MATLAB, C, C++, Java, Calculus and Analysis in one variable, Calculus and Analysis in several variables, Linear Algebra I, Linear Algebra II, Approximation Theory, Numerical Analysis, Deterministic Models of Operations Research.

The Technion: Calculus and Analysis in one variable, Calculus and Analysis in several variables.

University of Haifa: Calculus and Analysis in one variable, Calculus and Analysis in several variables, Linear Algebra I, Linear Algebra II, Discrete Mathematics, Probability and Statistics, Infinite Set Theory, Introduction to Algorithms.

Ironi Gimel High school, Haifa: All levels of Mathematics and Physics.

5. Academic and Professional Awards

2021: Fourth most cited article in the past three years in Optimization Methods and Software, 2021.

<https://www.tandfonline.com/action/showMostCitedArticles?journalCode=goms20>

2020: First Prize: Hackathon – Free writing home exams, Entrepreneurship Center Tel-Aviv University and Shenkar.

2018: Mathematics for Industry Network - Short Term Scientific Mission (STSM) to Germany, Heidelberg and Kaiserslautern.

2017: The Austria-Israel Academic Network Innsbruck (AIANI) Fellowship.

Seventh Framework Programme - The People Programme, short scientific visit to Kiev and Lviv, Ukraine.

2016: Seventh Framework Programme - The People Programme, short scientific Visit to Lviv, Ukraine.

2015: TEMPUS IRIS short travelling grant. Visit Berlin and Heidelberg.

2012 - 2014: The Minerva Fellowship Program, (twice).

2012: Faculty of Mathematics excellence award, The Technion.

Vivian Konigsberg award for excellence in teaching, The Technion.

2011: The Israel Mathematical Union (IMU) travel award.

The Polish Mathematic Society (PTM) travel award.

2010: Vivian Konigsberg award for excellence in teaching, The Technion.

2008 – 2012: Ph.D. scholarship, The Technion.

2008: Dean of Graduate Studies excellence award, University of Haifa.

2005 – 2007: Dean's Honors list of M.Sc. students, University of Haifa (twice).

2003 – 2005: Dean's Honors list of B.Sc. students, University of Haifa (twice).

6. Membership in Professional Societies

COST Management Committee member – [COST Action CA19130](#) -Fintech and

Artificial Intelligence in Finance – Towards a transparent financial industry
 COST Management Committee Member - [COST Action TD1409](#)-Mathematics
 for Industry Network (MI-NET) ,
[Israel Mathematical Union](#) (IMU),
 Council of The [European Consortium for Mathematics in Industry](#) (ECMI),
[Fraunhofer Society](#),
[European Mathematical Society](#) (EMS).

7. Professional Public Activities

Conference and Workshop Organization:

2023: Workshop on Outcome Evaluation and Pricing in Superiorization and in Multiobjective Optimization, Kaiserslautern, Germany, July 17-20, 2023.

Online Symmetry Webinar - Nonlinear Analysis and Its Applications, March 10, 2023.

2021: Initiator and organizer of the workshop “Optimization, Algorithms and industrial application”, Braude, 4/3/21.

2020: Organizer and speaker at The Felix Klein Autumn Workshop, jointly with The High Performance Center Simulation and Software Based Innovation, Fraunhofer ITWM, 16/9/20-18/9/20.

Initiator and organizer jointly with The Fraunhofer Institute for Industrial Mathematics ITWM: Expert Sessions “Projection Methods”. A weekly online seminar series 23/6/20 - 26/8/20.

2019: Organizing committee: The 149 European study group with industry, March 4-8, Innsbruck, Austria.

2018: Initiator and organizing committee: Industrial Day with Tnuva Ltd., December 13, 2018, ORT Braude, Karmiel, Israel.

Initiator and chief organizer: Mathematics high-school teacher’s seminar, October 16, 2018, ORT Braude, Karmiel, Israel.

2017: Organizing committee: The Twentieth Israeli bi-annual Mini-Workshop in Applied and Computational Mathematics, December 28, 2017, ORT Braude, Karmiel, Israel.

Initiator and chief organizer: Mathematics high-school teacher’s seminar, November 21, 2017, ORT Braude, Karmiel, Israel.

Initiator and chief organizer: Industrial Day, October 15, 2017, ORT Braude, Karmiel, Israel.

Organizing committee: Contemporary Problems in Mathematics and Physics, Tashkent, Uzbekistan, October 6-10, 2017.

Initiator and chief organizer: The First Israeli Modelling Week, July 2-6, 2017, Nahariya-Karmiel, Israel.

Initiator and chief organizer: Industrial Day, June 29, 2017, Holon Institute of Technology, Israel.

Organizing committee: The First IMU-INdAM Conference in Analysis, May 29-June 1, 2017, Tel-Aviv, Israel.

Organizing committee: The workshop on Operator Theory and Applications, September 26-27, 2017, Nahariya, Israel.

2016: Organizing committee: The workshop on Operator Theory and Applications, September 26-27, 2016, Nahariya, Israel.

2015: Organizing committee: Complex Analysis & Dynamical Systems VII, May 10-15, 2015, Nahariya, Israel. ORT Braude College, Bar-Ilan University and the University of South Florida .

2013: A one-day marathon on "Projection Methods in Feasibility, Superiorization and Optimization", December 19, 2013, Haifa, Israel. The Center for Mathematics and Scientific Computation (CMSC) and The Caesarea Rothschild Institute (CRI) for Interdisciplinary Applications of Computer Science. (Helped organizing)

Initiator and chief organizer: Workshop on Projection Methods - Theory & Practice, June 19-20, 2013, Kaiserslautern, Germany. Fraunhofer - ITWM and Felix Klein Center for Mathematics, Kaiserslautern, Germany.

Associate Editor

2021 – Present: [Communications in Optimization Theory](#)

2021 – Present: [Journal of Optimization Theory and Applications](#)

2021 – Present: [Symmetry](#)

2020 – Present: [Fixed Point Theory and Algorithms for Sciences and Engineering](#)

2020 – Present: [Applied Numerical Mathematics](#)

2019 – Present: [Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas](#)

2019 – Present: [Journal of Applied and Numerical Optimization](#)

2017 – Present: [Numerical Algorithms](#)

2015 - Present: [Journal of Industrial and Management Optimization](#)

Refereeing for scientific journals

Abstract and Applied Analysis, Fixed Point Theory and Applications, Applied Mathematics and Mechanics, Inverse Problems, Journal of Inequalities and Applications, Computational Optimization and Applications, Inverse Problems in Science & Engineering, Nonlinear Analysis: Theory, Methods & Applications, Bulletin of Mathematical Analysis and Applications, Journal of Global Optimization, Mathematical Modelling and Analysis, Numerical Algorithms,

Optimization letters.

9. Plenary and Invited Talks at Conferences

2023: Workshop on Outcome Evaluation and Pricing in Superiorization and in Multiobjective Optimization, Kaiserslautern, Germany, July 17-20, 2023.

Challenges in Continuous Optimization and its Applications, Tel-Aviv, Israel, September 11-13, 2023. (Attending)

Optimization at Bernoulli Institute, Groningen, The Netherlands, June 18-20, 2023.

2022: International Conference on Operational Research (KOI), Šibenik, Croatia, September 28-30, 2022.

2nd Real-Time Adaptive Particle Therapy Of Cancer (RAPTOR) School: Loop Requirements, Ljubljana, Slovenia, September 4-9, 2022.

EURO 2022, Espoo, Finland, July 3-6, 2022.

Symposium Innovation on Teaching Mathematics (iTEM) at High Education Institutions: Experiences on Classroom, Tenerife, Spain, March 15-18, 2022.

2021: Third IMA and OR Society Conference on Mathematics of Operational Research April 20-23, 2021

EUROPT2021 – Toulouse, France, July 7-9, 2021

Doing Your PostDoc in Germany - Info Webinar, Embassy of the Federal Republic of Germany, 1/3/21 (online).

2020: The Felix Klein Autumn Workshop, Fraunhofer ITWM, 16/9/20 (online).

2019: British Applied Mathematics Colloquium, April 24-26, 2019, Bath, UK.

2018: Deep Learning in Imaging Sciences Workshop, July 19-20, 2018, Innsbruck, Austria.

The IMU 2018 annual meeting, May 25, 2018, The Technion, Israel.

Math for Digital Factory, March 20-23, 2018, Limerick, Ireland.

2017: A German-Israeli Research Workshop on Optimization, The Technion, October 16-19, 2017.

Contemporary Problems in Mathematics and Physics, Tashkent, Uzbekistan, October 6-10, 2017.

The First IMU-INdAM Conference in Analysis, May 29-June 1, Tel-Aviv, Israel.

The IMU Annual Meeting, May 25-28, Akko, Israel.

SIAM Conference on Computational Science and Engineering (CSE17), February 27-March 3, Atlanta, Georgia, USA.

2016: The 125 European Study Group with Industry (ESGI), December 4-9, Limassol, Cyprus.

The 118 European Study Group with Industry (ESGI), July 4-8, Dublin, Ireland.

Geometric Analysis in Control and Vision Theory, May 8-14, Bergen/Voss, Norway.

2015: The 17th Mini-Workshop in Applied and Computational Mathematics, December 28, The Weizmann Institute, Israel.

Workshop on Geometric and Singular Analysis, February 8-13, Potsdam, Germany. (Attended)

2014: Workshop on Nonlinear Analysis and Optimization, November 30, Technion, Israel.

The Workshop on Operator Theory and Applications, September 26-27, ORT Braude College of Engineering, Karmiel, Israel. (Attended)

2013: A one-day marathon on "Projection Methods in Feasibility, Superiorization and Optimization", December 19, Haifa, Israel.

Workshop on Projection Methods - Theory & Practice, June 19–20 Kaiserslautern, Germany.

2012: Infinite Products of Operators and Their Applications, May 21–24, The Technion, Haifa, Israel.

2011: Israeli-Polish Mathematical Meeting, September 11-15, Łódź, Poland.

Operations Research Society of Israel (ORSIS) Annual Conference, May 29-30, Akko, Israel.

SIAM Conference on Optimization, May 16-19 Darmstadt, Germany.

2010: The Operations Research Society of China (ORSC) Annual Meeting, October 15-17, Beijing, P.R. China.

Workshop on Optimization Theory and Related Topics, January 11-14, The Technion and the University of Haifa, Haifa, Israel.

2009: Complex Analysis and Dynamical Systems IV, May 18-22, The Bar-Ilan University, the ORT Braude College of Engineering and the University of Miami, Nahariya, Israel. (Attended)

10. Colloquium & Seminar Lectures

2020: Virtual Mathematics Colloquium, December 4, 2020, Sunway University Malaysia.

2018: Guest lecture, December 5, Mathematics Department, University of Alicante, Spain.

Series of 3 talks, September 25, 26, 30, Civil Aviation University of China, Tianjin, China.

Guest lecture, August 18, Heidelberg Collaboratory for Image Processing (HCI), University of Heidelberg, Heidelberg, Germany.

Guest lecture, March 8, 2018, Institute of Mathematics, University of Würzburg, Würzburg, Germany.

2017: Guest lecture, December 7, 2017, Department of Applied Mathematics, The University of Innsbruck, Austria.

2016: Continuous Optimization: Challenges and Applications, September 5-8, The Technion, Israel. (attended)

2015: Colloquium talk, Heidelberg Collaboratory for Image Processing (HCI), University of Heidelberg, July 15, Heidelberg, Germany.

2012 - 2014: Felix Klein Center for Mathematics, June 20, 2013, Kaiserslautern, Germany.

Computational Analysis Seminar, September 16, 2014, Jacobs University, Bremen, Germany.

Colloquium talk, September 11, 2014, Institute for Numerical and Applied Mathematics University of Göttingen, Germany.

The Department of Mathematics seminar, April 8, 2014, ORT Braude College of Engineering, Karmiel, Israel.

Fraunhofer's ITWM Seminar, Kaiserslautern, Germany (4 times: March 25, 2013, January 27, 2014, June 30, 2014, July 1, 2014).

Colloquium talk, Mathematics of Computation seminar, May 26, 2014, Institute for Numerical Simulation, Bonn, Germany.

Colloquium talk, May 15, 2015, Rochester Institute for Technology, Rochester, NY, USA.

2007 - 2014: Nonlinear Analysis and Optimization Seminar, The Technion, Haifa, Israel (7 times).

2010: Nonlinear Analysis and Optimization Seminar, September 30, Peking University, Beijing, P.R. China.

11. Invited Scientific Visits:

2023: Erasmus+ Politecnico di Torino, Torino, Italia, July 2-8, 2023.

Erasmus+ Greece International Hellenic University, May 23-30, 2023.

2022: Erasmus+ Greece International Hellenic University, April 8-14, 2022.

Invited to The University of Alicante, Spain, December 2023.

2020: Invited to The Fraunhofer Institute for Industrial Mathematics, Kaiserslautern, Germany, January 2020.

2019: Invited to Loma Linda University, Loma Linda, CA, USA, July 2019.

2018: Invited to the University of Alicante, Spain, December 2018.

Invited to the Civil Aviation University of China, Tianjin, China, September 2018.

Invited to Fraunhofer Institute for Industrial Mathematics, Kaiserslautern, Germany and the Heidelberg Collaboratory for Image Processing (HCI), University of Heidelberg, Heidelberg, Germany, August 2018.

Invited to the University of Innsbruck, Innsbruck, Austria, July 2018.

Invited to the University of Würzburg, Würzburg, Germany, March, 2018.

2017: Invited to the University of Innsbruck, Austria (Austria-Israel Academic Network Innsbruck (AIANI Fellowship)), December 2017.

Invited to Institute for Condensed Matter Physics of the National Academy of Sciences of Ukraine, Lviv Ukraine. July 2017.

2016: Invited to the Department of Electrical Engineering, Computer Engineering and Informatics, Cyprus University of Technology, Limassol, Cyprus. December 2016.

Invited to Institute for Condensed Matter Physics of the National Academy of Sciences of Ukraine, Lviv Ukraine. July 2016.

Invited to Fraunhofer Institute for Industrial Mathematics, Kaiserslautern, Germany. January 2016.

Invited to Heidelberg Collaboratory for Image Processing (HCI), University of Heidelberg, Heidelberg, Germany. January 2016.

2015: Invited to the Berlin Mathematical School (BMS), Berlin, Germany, January 2015.

Invited to Fraunhofer Institute for Industrial Mathematics, Kaiserslautern, Germany, January 2015.

Invited to Heidelberg Collaboratory for Image Processing (HCI), University of Heidelberg, Heidelberg, Germany, October 2015.

2014: Invited to Institute for Numerical and Applied Mathematics University of Göttingen, Germany, June 2014.

Invited to the Mathematics Department at Jacobs University, Bremen, Germany, June 2014.

Invited to Institute for Numerical Simulation, Bonn, Germany, May 2014.

Invited to Rochester Institute for Technology, Rochester, NY, USA, May 2014.

2011: Invited to the Fraunhofer Institute for Industrial Mathematics, November 2011.

Invited to the University of Zielona Góra, Zielona Góra, Poland, September 2011.

2010: Invited to the Peking University, Beijing, P.R. China, September-October, 2010.

2006: Invited to the University of Cordoba, Cordoba, Spain, July 2006.

12. Guidance and Supervision of Students

2022-present: (PhD student) Victor Amarachi Uzor, jointly with Prof. Oluwatosin Tope Mewomo at the University of Kwazulu-Natal, South Africa.

2020-2023: (Master student) Xiaoxiao Li, jointly with Prof. Qiao-Li Dong at College of Science, Civil Aviation University of China, Tianjin 300300, P. R. China.

2020-2021: (Bachelor final project) Ayala Elkoby, (pupils excellency program) Omer Seter.

2019-2020: (Bachelor final project) Shira Bar-Dov.

2018 - 2020: Esther Bonacker (Jointly with Prof. Karl-Heinz Küfer), Technical University of Kaiserslautern and Fraunhofer Institute for Industrial Mathematics, Kaiserslautern, Germany.

2017 - 2018: (Bachelor final project) Dima Teller, Mohamed Dallasheh , Yakir Peretz.

13. PhD Thesis Examiner

2020: Dr. Kazeem Olalekan Aremu, University of KwaZulu-Natal, South Africa.

2019: Dr. Jolaoso Lateef Olakunle, University of KwaZulu-Natal, South Africa.

2018: Dr. Ruben Campoy Garcia, University of Murcia, Spain.