





Michael Orlitzky

Curriculum Vitae

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EDUCATION

- 2009–2010 **Applied Mathematics Lab**
Towson University
- 2009 **B.S. Mathematics (Cum Laude)**
Towson University
- 2012 **M.S. Applied and Industrial Mathematics**
Towson University
- 2017 **Ph.D. Applied Mathematics**
UMBC

PUBLICATIONS

- 2016 **An improved bound for the Lyapunov rank of a proper cone**
With M.S. Gowda. Optimization Letters, 10:11–17.
- 2017 **The Lyapunov rank of an improper cone**
Optimization Methods and Software, 32(1):109–125.
- 2018 **Lyapunov rank of polyhedral positive operators**
Linear and multilinear algebra, 66(5):992–1000.
- 2018 **Positive and Z-operators on closed convex cones**
Electronic Journal of Linear Algebra, 34:444–458.
- 2020 **When a maximal angle among cones is nonobtuse**
Computational and Applied Mathematics, 39.
- 2021 **Gaddum's test for symmetric cones**
Journal of Global Optimization, 79(4):927–940.
- 2022 **On the symmetry of induced norm cones**
Optimization 71(3):441–447.
- 2022 **Proscribed normal decompositions of Euclidean Jordan algebras**
Journal of Convex Analysis, 29(3):755–766.
- 2022 **Tight bounds on Lyapunov rank**
Optimization Letters, 16:723–728.
- 2022 **Rank computation in Euclidean Jordan algebras**
Journal of Symbolic Computation, 113:181–192.

PUBLICATIONS (CONT'D)

- 2024 **Continuity of the conic hull**
Journal of Convex Analysis, 31(1):255–264.
- 2024 **Jordan automorphisms and derivatives of symmetric cones**
Linear Algebra and its Applications (accepted).

INDUSTRY EXPERIENCE

Viabit, LLC 2003–PRESENT
Chief of network operations

Ensure the security and availability of servers, websites, email accounts, and infrastructure.

Vordex, LLC 2007–2009
Lead programmer

Develop electronic Medicaid billing software.

Gentoo Linux 2013–PRESENT
Developer

Maintain system administration and mathematics packages.

TEACHING

FALL 2019 **MATH637: Advanced topics in operations research**
Towson University

MASTER'S STUDENTS

SPRING 2020 **Jeffrey Cavanagh**
Towson University

FALL 2020 **Bryten Ives**
Towson University

AWARDS

2010 **Towson University undergraduate research award**

2010 **Fisher College of Science and Mathematics undergraduate research award**