

David T. Nguyen

FRG Postdoc, AIM

600 E Brokaw Rd
San Jose, CA 95112, USA
✉ dtn@aimath.org
📄 aimath.org/dtn/
Citizenship: USA

Employment

- 2022-2025 **Queen's University, Kingston, Ontario, Canada.**
Coleman Postdoc
- 2021-2022 **American Institute of Mathematics, San Jose, CA, USA.**
FRG Postdoc
- 2016-2021 **University of California, Santa Barbara, USA.**
Teaching Associate: Summer 2018, Summer 2019, Summer 2020.
Teaching Assistant
- 2014-2016 **California State Polytechnic University, Pomona, USA.**
Graduate Teaching Associate

Education

- 2016-2021 **Ph.D., Mathematics, UC Santa Barbara.**
Advisor: Professor Yitang Zhang
- 2016-2019 **M.A., Mathematics, UC Santa Barbara.**
- 2014-2016 **M.S., Mathematics, Cal Poly Pomona.**
- 2009-2014 **B.S., Mathematics, Cal Poly Pomona.**

Primary Research Interests

Analytic and multiplicative number theory, prime numbers, divisor sums, moments and ratios of L -functions, random matrix theory.

Publications

- 2021 **Topics in Multiplicative Number Theory.**
Thesis (Ph.D.)-University of California, Santa Barbara. 2021. 187 pp. ProQuest LLC.
- 2021 **Generalized divisor functions in arithmetic progressions: I.**
Journal of Number Theory, vol. **227** (2021), 30-93.
- 2019 **Explicit Formulas for Enumeration of Lattice Paths: Basketball and the Kernel Method, with C. Banderier, C. Krattenthaler, A. Krinik, D. Kruchinin, V. Kruchinin, and M. Wallner.**
Book Chapter. Springer Developments in Mathematics Series, vol. **58** (2019), 78-118.

Teaching (as Instructor of Record)

- **Vector Calculus I, UCSB Math 6A.**
Summer 2020 Session B (70-80 students class, Online)
Summer 2020 Session A (70-80 students class, Online)

- **Differential Equations, UCSB Math 4B.**
Summer 2019 Session B (100-110 students class)
Summer 2018 Session A (90-100 students class)
- **Trigonometry, CPP Math 105.**
Spring 2016 (25-30 students class)
- **Basic Algebra, CPP Math 11.**
Winter 2016 (25-30 students class)

Fellowships and Awards

- 2022 **Cal Poly Pomona Golden Leaves Author Awards 2022.**
Alumni Category
- 2019, 2020 **UCSB Graduate Student Association Excellence in Teaching Award.**
Nominations
- 2018 **Emma and Dick Lehmer Prize, (for one of two best presentations at West Coast Number Theory conference 2018).**
- 2016-2017 **UCSB Graduate Division Central Fellowship: the Regents in Mathematics.**

Mentoring

- 2019-2021 **Directed Reading Program Mentor, UCSB.**
Undergraduate mentees: Jennifer Do, Casey Donlan, Tien Huynh, Andrew Miller, David Vartanian, Ryan Yick, Tanner Zuleeg.
Their works are available here: [Undergraduate Mentoring](#).
- 2018-2020 **Mathematics Department Mentor, UCSB.**
I provided mentoring to first-year mathematics graduate students at UCSB.

Services

Academic Service

- 2019-2021 **Directed Reading Program co-organizer, UCSB,** The Directed Reading Program is a one-on-one mathematics mentoring program in which graduate students or junior faculty members mentor UCSB undergraduates in reading and research projects.
<https://ucsbdrrp.weebly.com/>
- 2017-2021 **Graduate Number Theory Seminar co-organizer, UCSB,** Weekly seminars on topics in analytic number theory aim towards graduate students,
<https://web.math.ucsb.edu/GNTseminar/>.

Community Outreach

- 2019 **South Coast Math Superbowl, Earl Warren Showgrounds, Santa Barbara,** An annual mathematics competition event for students in grades 4, 5, and 6 in schools throughout south Santa Barbara County.
Keynote panelist, May 29, 2019.