

## Introduction for postdoctoral position at UMN

4 messages

Maxie Schmidt <maxieds@gmail.com>

Sat, Nov 20, 2021 at 8:00 AM

To: garrett@umn.edu

Cc: Maxie Schmidt <mschmidt34@gatech.edu>

Dear Professor Garrett,

I am applying for the postdoctoral position at UMN through Math Jobs this year after I graduate with my Ph.D. in mathematics from the Georgia Institute of Technology in 2022. I want to introduce myself and describe my research interests to you.

My doctoral thesis committee is headed by Professors Michael Lacey and Josephine Yu with Matt Baker, Jayadev Athreya at the University of Washington, and Bruce Berndt at the University of Illinois at Urbana-Champaign. The basis for the work in my dissertation summarizes and extends work of mine published over the last few years in the Ramanujan Journal, Acta Arithmetica and the American Mathematical Monthly. This work connects functions from multiplicative number theory with the theory of partitions. I feel that a position at your university is a good fit for both myself and the established faculty working in number theory, combinatorics and experimental mathematics. My background and experience in open source software, symbolic computation and experimental mathematics will also add breadth to the faculty at your institution that sets my goals and career trajectory apart from other distinguished applicants.

My research combines number theory, combinatorics and software development. More broadly, I have interests in studying combinatorial and analytic number theory, in applied cryptography and embedded computer hardware, and in software engineering. My active peer-reviewed publication list is diverse with now over twenty entries, as is my public profile of open source software projects, each of which reflect the breadth and depth of my combined research areas. I am always open to exploring challenging and interesting new problems in mathematics and software engineering. I have been funded as a graduate research assistant for the last three years or so developing open source software in applied mathematical biology at GA Tech that has led to a recent publication in Bioinformatics in 2021. My recent work in analytic number theory characterizes the partial sums of the Möbius function. The manuscript showcases new connections to strongly additive functions and the summatory functions of key unsigned sequences whose distributions are given by an Erdős-Kac theorem type variant tending to non-central normal for large x. The manuscript is accepted this year for my second publication in the Journal of Number Theory since entering graduate school. In January of 2022, I am giving an invited talk at the special session in early career number theory at the AMS Joint Mathematics Meetings in Seattle about this new work of mine in analytic number theory.

If you are available this Fall or early next year, I would like to talk more with you. I am available over email at this address or to talk on several video chat applications. I am also happy to provide you with copies of my application materials for the position in addition to the CV information that is listed on my website.

Thank you for your time.

Sincerely,

Maxie Dion Schmidt

https://people.math.gatech.edu/~mschmidt34

https://github.com/maxieds

https://arxiv.org/a/schmidt\_m\_2.html

Paul Garrett <garrett@umn.edu>

Reply-To: garrett@math.umn.edu

To: Maxie Schmidt <maxieds@gmail.com>

Dear Maxie (if I may),

Thanks for your interest in U of MN! We do have an active department, and the city itself is a great place to live (although with the travails of many cities).

Although I can perhaps appreciate your work, I'm not expert enough to pretend to be an advocate for you... and I'm not on the post-doc committee, which adds another hurdle. (And, in 2019-20, I worked hard on the Diversity, Equity, Inclusivity committee as its chair, and in fact alienated quite a few of "my colleagues", so I'm not sure that my "currency" is what it once may have been.)

My colleague Adrian Diaconu \_is\_ on the post-doc hiring committee, and certainly has a subtler appreciation than I do of much of analytic number theory. You might want to email/talk to him.

In any case, good luck with the whole job-hunting business!

Sat, Nov 20, 2021 at 1:34 PM

Best, -paul

[Quoted text hidden]

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Paul Garrett
Professor of Mathematics
he/his/him [or] they/their/them
fully vaccinated, mask-wearing

## Maxie Schmidt <maxieds@gmail.com>

Sat, Nov 20, 2021 at 4:26 PM

To: garrett@math.umn.edu

Dear Paul,

Thank you for the reply. I also feel strongly about diversity, equity and inclusion. While applying for postdoc positions this year, I realized that I needed to put together a solid diversity statement. I am sharing mine with you in case you want to read it since you will not be on the committee.

Happy holidays,

Maxie

[Quoted text hidden]



diversity-statement.pdf 33K

Paul Garrett <garrett@umn.edu> Reply-To: garrett@math.umn.edu

To: Maxie Schmidt <maxieds@gmail.com>

Dear Maxie,

In my opinion, you would be a "great catch", for any math dept, with your very broad interests and competencies. "Open software"/freeware is another one of my political/ideological things. And I put all my course notes and research notes on-line. Etc. Math depts also do need more people who are computer-literate, and not just about software

Sat, Nov 20, 2021 at 5:23 PM

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packages.:)
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As you may already know, "broad interests/scholarship/..." is not what most of the supposedly-top universities think they're looking for. This is foolish, but, well, you probably also know the incredible stodgy inertia of academe, insulated as it is (even though no longer infinitely so) from reality.

So, you may find yourself under-appreciated by many places, but I hope (both for the place and for you) that a quite-good place can see the unusual addition you would make to their dept.

I will email Adrian Diaconu to encourage him to bring you up as a good candidate in our postdoc pool. I can't promise anything... As I'd commented, the gender/race/etc politics here is crazy... so I don't know what will happen.

Best,
-paul
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