

EDUCATION	<b>University of Washington</b> <i>Ph.D. in Computer Science and Engineering</i> • Advisor: Anup Rao • Research areas: Coding Theory, Complexity Theory	Seattle, USA 2018 - present
	<b>McGill University</b> <i>B.Sc. Honours in Mathematics and Physics, Minor in Computer Science</i>	Montreal, Canada 2014 - 2018
PUBLICATIONS	<ol style="list-style-type: none"> <li><b>Tensor Reed-Muller Codes: Achieving Capacity with Quasilinear Decoding Time</b> with Emmanuel Abbe and Colin Sandon. <i>Preprint 2026</i></li> <li><b>From Bit to Block: Decoding on Erasure Channels</b> with Henry Pfister and Gilles Zémor. <i>ISIT 2025</i></li> <li><b>List-Decoding Capacity Implies Capacity on the <math>q</math>-ary Symmetric Channel</b> with Francisco Pernice and Mary Wootters. <i>STOC 2025</i></li> <li><b>A Criterion for Decoding on the Binary Symmetric Channel</b> with Anup Rao. <i>Advances in Mathematics of Communications 2024</i></li> </ol>	
TEACHING	<b>Teaching Assistant</b> , University of Washington	
	<ul style="list-style-type: none"> <li>CSE 421: Introduction to Algorithms      Spr 2025, Fall 2021, Fall 2020, Win 2020</li> <li>CSE 531: Computational Complexity      Spring 2022</li> <li>CSE 431: Introduction to Theory of Computation      Spring 2021</li> <li>CSE 521: Applied Algorithms      Winter 2021</li> <li>CSE 311: Foundations of Computing 1      Spr 2019, Spr 2020, Fall 2019, Fall 2018</li> <li>CSE 373: Data Structures and Algorithms      Summer 2019</li> <li>CSE 490: Toolkit for Modern Algorithms      Winter 2019</li> </ul>	
AWARDS	NSERC Postgraduate Scholarship	2020
	NSERC Undergraduate Student Research Award	2016, 2017
TALKS	<b>University of Copenhagen:</b> List Decoding Capacity Implies BSC Capacity	Aug 2024
	<b>UW Theory Seminar:</b> On List-Decoding Transitive and Doubly Transitive Codes Over the Binary Symmetric Channel	Mar 2023
	<b>UW Theory Lunch:</b>	
	<ul style="list-style-type: none"> <li>Reed-Muller Codes Achieve Bit-Capacity      Mar 2024</li> <li>Top-Down Proofs for Constant Depth Circuits Lower Bounds      Nov 2023</li> <li>Applications of the Saddlepoint Method in Combinatorics      Oct 2022</li> <li>Weight Distribution of Reed-Muller Codes      Feb 2020</li> <li>Lower Bounds on Arithmetic Circuits with Bounded Coefficients      Jun 2019</li> </ul>	

SERVICE

**Reviewer:** *IEEE Transactions on Information Theory* 2024  
*IEEE International Symposium on Information Theory* 2024

**Area Chair for PhD Admissions:** University of Washington 2022

**Organizer for Theory Lunch:** University of Washington Fall 2023, Spring 2024

REFERENCES

**Anup Rao:** anuprao@cs.washington.edu

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**Mary Wootters:** marykw@stanford.edu