CV

Thea Li
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EDUCATION

2022 - 2023	**Master's Programme in Mathematics at Stockholm University and KTH Royal institute of Technology**
	Jointly organized master's program in general mathematics by Stockholm University and KTH Royal institute of Technology
2nd term	Type theory, Categorical logic, Theory of schemes, Theory and methodology of science
1st term	Galois theory, Reductive algebraic groups, Mathematical communication
2023 - 2024	**LMFI Programme at Paris Cité (M2)**
2nd term	Models of programming languages, Proofs and programs, Second order quantification and fixpoints
1st term	Models of programming languages, Set theory, Computability theory, Model theory, Functional programming and Coq
2020 - 2022	**Bachelor's Programme in Mathematics at Stockholm University**
	Bachelor's program in general mathematic amounting to 180 ECTS, graduated with 195 ECTS after two years of studies (the first term was completed during my last year of high school).
5th term	Set theory and Metamathematics (Continuation on set theory and intro to proof theory), Number theory, Bachelor's degree project
4th term	Logic II (basic set theory, model theory and computability theory), Commutative algebra and algebraic geometry, Topology, Advanced real analysis
3rd term	Linear algebra, Algebra and combinatorics, Analysis A and B, Programming for mathematics, Probability theory I, Abstract algebra, Foundations of analysis
2nd term	Complex analysis, Mathematical logic, Ordinary differential equations, Mathematics, science & society, Philosophical logic, Logic I
1st term	Mathematics I, general introduction to algebra, calculus and analysis

RESEARCH EXPERIENCE

Feb 2022 - May 2022	**Bachelor's Thesis under the supervision of Peter Lefanu Lumsdaine**
	The internal language of sheaves and applications to algebraic geomerty.
Jun 2023 - Jul 2023	**Internship at LIX under the supervision of Noam Zeilberger**
	Determinization procedures for categorical automata.
Feb 2024 - 20Jun 24	**Participating in the Adjoint School**
	Mentored reading group and research program for young researchers in applied category theory

PUBLICATIONS

| 2024 | **Fibrational perspectives on determinization of finite-state automata** |
| | Accepted to ACT 2024 |

Scholarships

| Sept 2023 - Jul 2024 | **PGSM scholarship offered by the Fondation Sciences Mathématiques de Paris** |

Talks

| Nov 2022 | The internal language of sheaves and applications to algebraic geometry, **Dutch Categories and Types Seminar** (DutchCATS) |

Teaching Experience

Nov 2022 - Jan 2023	**Teaching Assistant for the course Algebra and Combinatorics at Stockholm University**
	Part time teaching assistant position (6h/week), in charge of exercise sessions for the first year bachelor's mathematics course covering basic abstract algebra and combinatorics.
Jun-Aug 22/23	**Teaching assistant for the preparatory mathematics course at Stockholm University**
	Part time teaching assistant position (30h/week) for a summer course preparing students for the first year of bachelor's in mathematics. Tasks included grading homework and exams and answering questions from students.
Sep 2021 - Jun 2023	**Teaching assistant for the course Mathematic's I**
	Part time teaching assistant posistion (4h/week). Holding question sessions, exercise sessions for first term bachelor's students and grading exams.

Languages

Swedish	-	native speaker
Chinese	-	native speaker
English	-	fluent
French	-	some basic notions

Programming Languages

Agda	-	basic knowledge
Coq	-	basic knowledge
Python	-	basic knowledge
R	-	basic knowledge
C++	-	basic knowledge