# Nikhil Pappu

## Basic Info

: nikpappu@pdx.edu  WWW: http://nikhilpappu.info

First year Computer Science PhD student at Portland State University. Interested in cryptography, complexity theory, quantum computing, and more broadly in theoretical computer science.

## Institutions

2021- | **PhD in Computer Science**
*Portland State University, USA*
Conducting research focusing on post-quantum cryptography.

2016-2021 | **Integrated M.Tech in Computer Science and Engineering**
*IIIT Bangalore, India*
CGPA: 3.39/4.00

## Experience

Winter 2022 | **Teaching Assistant - Introduction to Cryptography**
*Portland State University* Instructor: Fang Song

Fall 2021 | **Teaching Assistant - Discrete Structures II**
*Portland State University* Instructor: Suresh Singh

Spring 2021 | **Master's Thesis**
*IIIT Bangalore* Advisor: Ashish Choudhury
Finished my master's thesis titled *Perfectly-Secure Asynchronous Multiparty Computation for General Adversaries.*

Spring 2021 | **Teaching Assistant - Foundations of Cryptography**
*IIIT Bangalore* Instructors: Ashish Choudhury, Srinivas Vivek

Fall 2020 | **Research in Secure Multi-Party Computation**
*IIIT Bangalore* Advisor: Ashish Choudhury
Studied information-theoretic secure multi-party computation tolerating a generalized non-threshold adversary in the asynchronous communication model. Submitted some of our results in a paper titled *Perfectly-Secure Asynchronous MPC for General Adversaries (Extended Abstract)*, which has been published in INDOCRYPT 2020.

Fall 2020 | **Teaching Assistant - Discrete Mathematics**
*IIIT Bangalore* Instructor: Ashish Choudhury

Summer 2018 | **Open Source Developer - Google Summer of Code 2018**
*SymPy: a Python library for symbolic mathematics.* Mentors: Jason Moore, Ondřej Čertík
Implemented a parser that translates Autolev (a proprietary symbolic dynamics language, now superseded by MotionGenesis) code to SymPy code using the ANTLR parser generator. More details here, and here.

## Publications

2020 | **Perfectly-Secure Asynchronous MPC for General Adversaries (Extended Abstract)**
Ashish Choudhury, Nikhil Pappu
INDOCRYPT 2020

## Programming Skills

Skills | Python, C, C++, Java, HTML5, Javascript, Git, Jenkins, Docker, MySQL, Android, LaTeX/XeLaTeX, bash/shell, SciPy, scikit-learn