

# JAN-PAUL VINCENT RAMOS-DÁVILA

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## EDUCATION

### Cornell University

2021 - 2025

*Bachelor of Arts in Mathematics, Computer Science, Philosophy*

## EXPERIENCE

### Software Verification Researcher

May 2022 - Present

Carnegie Mellon University - Institute for Software Research

Research Experience for Undergraduates in Programming Languages and Software Verification.

*In Progress*

### Programming Languages Researcher

November 2021 - Present

Cornell University - Bowers College of Computing and Information Science

Member of the Computer Architecture & Programming Abstractions research group on tools for the Calyx compiler infrastructure. An infrastructure for building compilers that generate hardware accelerators.

### Software Engineering Trainee

July 2021 - August 2021

Google Computer Science Summer Institute

Studied programming fundamentals for web development in JavaScript directly from Google engineers and got an inside look on Google employee tools used for web development.

Developed a peer-to-peer instant messaging architecture and user interface.

## PUBLICATIONS & PROJECTS

RNAfoldml: An OCaml package for predicting RNA secondary structure

Inle Bush, **Jan-Paul Ramos**, Songyu Ye

Domain Specific Language for differential equations

ISEF '21

Benjamin Philippe Applegate, **Jan-Paul Ramos**

Pythagorean Triples in Pascal's Triangle: A computational and algebraic approach

ISEF '20

**Jan-Paul Ramos**

## HONORS & AWARDS

PLMW @ PLDI Travel Scholarship

2022

SIGPLAN Conference on Programming Language Design and Implementation

Most Outstanding Exhibit in Science, Technology, Engineering and Mathematics

2021

Yale School of Engineering & Applied Science

Regeneron International Science and Engineering Fair Finalist

2020/2021

ISEF & Math Department of Education Puerto Rico

Office Naval Research Science Award

2020

United States Department of the Navy

## RELEVANT COURSEWORK

**Graduate Level** Advanced Programming Languages

Object Oriented Design and Data Structures

**Graduate Level** Category Theory for Comp Sci

Discrete Structures

Data Structures and Functional Programming

Computer System Organization

## TECHNICAL SKILLS

**Languages:** OCaml, Coq, Python, Java, JavaScript, Haskell, HTML/CSS, Rust, C++

**Tools:** Unix, VSCode, Git, IntelliJ IDEA, Docket, Jekyll, PEGjs