Jan-Paul Vincent Ramos-Dávila

I am a second-year undergraduate at Cornell University studying computer science and philosophy. My research involves designing and implementing tools for program verification, both skills I believe necessarily borrow from software engineering and analytical philosophy.

EDUCATION

Cornell University 2021 - 2025

Bachelor of Arts in Computer Science & Philosophy

 λ Activities: Competitive Programming Club (ICPC), Cornell Cinema Volunteer

EXPERIENCE

REUSE, Carnegie Mellon University

05/2022 - Present

Research Intern

 λ Advised by Dr. Jonathan Aldrich & Dr. Joshua Sunshine on Gradual Verification.

 λ Developed a property based testing tool for evaluating soundness of Gradual C_0 .

CAPRA, Cornell University

10/2021 - Present

Undergraduate Research Assistant

 λ Advised by Dr. Adrian Sampson in the Calyx compiler infrastructure team.

 λ Implemented the Graphicionado graph analytics accelerator in Calyx.

 λ Worked on a symbolic execution tool to verify Calyx code.

CSSI, Google 07/2021 - 08/2021

Software Engineering Student

 λ Learned programming fundamentals in JavaScript directly from Google engineers.

 λ Got an inside look at Google employee tools used for web development.

 λ Developed a peer-to-peer instant messaging system with a web interface.

PUBLICATIONS

POPL '23 (SRC) Evaluating Soundness of a Gradual Verifier with Property Based Testing

Jan-Paul Ramos-Dávila

HONORS

Travel Scholarship, ACM SIGPLAN Conference PLDI

2022

Finalist, Mathematics, Regeneron International Science and Engineering Fair

 $2020 \ \& \ 2021$

RELEVANT COURSEWORK

CS 6110 Advanced Programming Languages

CS 4120 Introduction to Compilers

CS 6117 Category Theory for Comp Sci

PHIL 3340 Modal Logic

CS 6156 Runtime Verification

TECHNICAL SKILLS

 $\textbf{Languages: *} \textbf{CCaml, *} \textbf{Python, *} \textbf{Scala, *} \textbf{Rust, Java, JavaScript, Haskell, C, Coq, *} \textbf{English, *} \textbf{Spanish, Italian} \textbf{Languages: *} \textbf{Algebraichter} \textbf{Algebr$

Tools: *Unix, *VSCode, *Git, IntelliJ IDEA, Docker, Jekyll, PEGjs, Neovim

* Most proficient