Jan-Paul Vincent Ramos-Dávila

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I am a second-year undergraduate at Cornell University studying computer science and philosophy. My research involves designing and building tools for incremental program verification and optimization.

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 6117 Category Theory for Comp Sci
CS 6156 Runtime Verification
CS 4120 Introduction to Compilers
PHIL 3340 Modal Logic

Technical Skills

Languages: *OCaml, *Python, *Scala, *Rust, Java, JavaScript, Haskell, C, Coq, *English, *Spanish, Italian
Tools: *Unix, *VSCode, *Git, IntelliJ IDEA, Docker, Jekyll, PEGjs, Neovim

* Most proficient