

ARTJOM PLAUNOV

347-337-4196 | artyemnyc@gmail.com | github.com/artjomPlaunov | artjomPlaunov.github.io (blog) |

EDUCATION

Hunter College

New York, New York

Bachelor of Arts in Computer Science, 3.9

EXPERIENCE

Adjunct Lecturer

Jan 2022 – May 2024

Hunter College

New York, NY

- Mentored and guided student groups through semester-long capstone projects, fostering collaboration, problem-solving, and programming skills. Provided strategic feedback to ensure projects met both academic and industry standards, contributing to the department's goal of producing technically proficient and team-oriented graduates.

Teaching Assistant

Sep. 2018 – May 2024

Hunter College

New York, NY

- Led weekly recitations on fundamental computer architecture concepts, providing students with a deep understanding of RISC architectures. Played a key role in reinforcing core technical concepts, contributing to the department's mission of developing well-rounded, technically skilled graduates.

Software Development Intern

Jan 2018 – Sep 2018

Department of Transportation

New York, NY

- Extended the functionality of the Department of Transportation's street sign maintenance system, automating a previously paper-based workflow for managing and repairing approximately 1,000,000 NYC street signs. This enhancement significantly improved operational efficiency, supporting the DOT's strategic goal of modernizing city infrastructure management. (C#, ASP.net, SQL)

PUBLISHED WORKS

Combining Analyses Within Frama-C

Co-author

- Kosmatov, N., **Plaunov, A.**, Shankar, S., Signoles, J. (2024). Combining Analyses Within Frama-C. In: Kosmatov, N., Prevosto, V., Signoles, J. (eds) Guide to Software Verification with Frama-C. Computer Science Foundations and Applied Logic. Springer, Cham.

TALKS

Frama-C Days

June 13-14, 2024

Maison de la Radio et de la Musique

Paris, France

- Cegarmc: Integrating Software Model Checking into Frama-C

PROJECTS

Database Management System | OCaml

- Designed and implemented core components of a relational database system; these include disk file and log management systems, an in memory buffer pool cache with an LRU-K replacement algorithm, transaction and recovery management, and an implementation of pipelined query processing. Implemented a disk-backed B+ tree for more efficient query processing.

Static Analysis Tool | OCaml, Lex, Yacc

- Implemented an abstract interpreter for a C-like programming language; it performs an interval analysis to over-approximate all possible program behaviors and look for possible runtime errors. The algorithm is extensible to other analysis domains. Also implemented the lexer and parser to transform the source code into the intermediate representation that the algorithm runs on.

TECHNICAL SKILLS

Languages: Proficient in: OCaml, Golang, Python. Quick at learning new languages and frameworks.