ALEKSANDR FEDCHIN

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EDUCATION

Tufts University 2020 - Present
Computer Science Ph.D. candidate

Advisor: Jeffrey Foster

Awards: Amazon Post-Internship Graduate Research Fellowship, 2022

Bard College 2016 - 2020
B.A. in Computer Science and B.A. in Classics

- Advisors: Sven Anderson (Computer Science), Robert Cioffi and James Romm (Classics)

Awards: Richard M. Siegel Memorial Prize in Science, Distinguised Scientist Scholarship, William F. Rueger Memorial Scholarship, Bard Foreign Scholarship, Murray Liebowitz Easter European Scholarship

LANGUAGES

- **Computer Languages** Python, Java, C#, Dafny, Boogie > Ruby, C, ML > Haskell, Kotlin, Prolog etc.
- **Natural Languages** English (fluent), Russian (fluent), German (C1), Latin & Ancient Greek

PUBLICATIONS

Chakarov, Fedchin, Rakamarić, Rungta: *Better Counterexamples for Dafny.* TACAS, 2022

Fedchin, Burns, Chaudhuri, Dexter: *Senecan Trimeter and Humanist Tragedy.* AJP, 2022

Fedchin, Dean, Foster, Mercer, Rakamarić, Reger, Rungta, Salkeld, Wagner, Waldrip: *A Toolkit for Automated Testing of Dafny.* NFM, 2023

SELECTED WORK & RESEARCH EXPERIENCE

Amazon Web Services – Applied Scientist Intern June 2022 - August 2022
Mentors: Lucas Wagner and Zvonimir Rakamarić

Worked on automated test generation for Dafny. Results published at NFM 2023.

Amazon Web Services – Applied Scientist Intern June 2021 - August 2021
Mentors: Zvonimir Rakamarić and Aleks Chakarov

Worked on counterexample extraction and test generation for Dafny. Results published at TACAS 2022.

Tufts Programming Languages Group September 2020 - Present
Advisor: Jeffrey Foster

Currently working on automated object synthesis for Dafny.

JetBrains – YouTrack ML Intern Summer 2019
Mentors: Vitaly Khudobakhshov and Denis Litvinov

Developed a machine-learning pipeline for automatic categorization of issue tracker tickets.

Quantitative Criticism Lab – Principal Collaborator November 2017 - Present
Advisors: Pramit Chaudhuri (UT Austin) and Joseph Dexter (Harvard)

Studied variant patterns of Latin iambic trimeter. Results published in AJP 2022.

Bard College Cognitive Systems Lab – Student Programmer January 2017 - May 2019
Advisor: Sven Anderson

Worked on automatic sentence alignment and text simplification.