UNIVERSITY OF CALIFORNIA, SAN DIEGO UCSD

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

SANTA BARBARA • SANTA CRUZ

March 31, 2025

Reference Letter for Sergei Gusev

We are pleased to write a letter of recommendation for Sergei Gusev, a student in our interactive online course "*Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving*." Sergei Gusev stood out as an excellent student who solved all the problems and passed a rigorous final exam in this course.

Each year, we write letters of recommendation for top students in computer science courses that we teach at our universities. We write such letters even if we never met these students in person as in 2020–2022 when most classes were moved online. However, we have never written letters of recommendation for top students in our online classes at Coursera, edX, and other online platforms. We find it unfair and, starting 2022, we are providing letters of recommendations to students who solved all problems and passed a rigorous final exam in our online class "*Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving*." This class extends our popular Massive Open Online Courses (MOOC) "*Algorithmic Toolbox*" from University of California at San Diego, one of the ten most popular computer science courses on Coursera.

Many standard *Algorithms 101* courses excel in introducing algorithmic ideas, but often fail to teach students how to implement algorithms, the crucial computer science skill. Learning algorithms without implementing them is like learning surgery based solely on reading an anatomy book. That is why "*Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving*" asks students to implement all algorithms they learn while following the best programming practices. Having taught both offline and online *Algorithms 101* courses, we estimate that "*Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving*" takes more time and effort to complete than most *Algorithms 101* courses at top universities. Students in this course use various learning materials (lecture videos, interactive online textbook, automated homework grading system, FAQs, etc.) and interact with a dedicated Teaching Assistant to implement 30 coding challenges. Some of these challenges are rather complex (such as the Closest Pair of Points Problem) — they are typically offered to graduate students at top universities rather than undergraduate students. As a result, only approximately 5% of all students enrolled in the course implement all coding challenges.

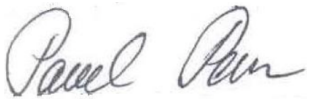
Sergei Gusev implemented all coding challenges in our course and earned the Certificate with Distinction. However, to enforce academic integrity, we do not automatically provide letters of recommendation to all students who earned the Certificate with Distinction — instead, we administer a rigorous exam for all students who requested a letter of recommendation. We are pleased to let you know that Sergei Gusev

passed this test by solving all the problems at the final exam, thus showing intellectual ability and potential that would see her/him do well in your organization.

We highly recommend Sergei Gusev for your institution.

Sincerely,

Alexander S. Kulikov,
Senior research fellow at St. Petersburg Department of Steklov Mathematical Institute and Professor at St. Petersburg State University
https://alexanderskulikov.github.io/



Pavel Pevzner,
Ronald R. Taylor Chair and Distinguished Professor of Computer Science, University of California at San Diego
https://bioalgorithms.ucsd.edu/

Information about Alexander S. Kulikov and Pavel Pevzner

Professor Alexander Kulikov directs the B.Sc. program "Modern Software Engineering" at St. Petersburg State University and the Computer Science Center in St. Petersburg that provides free computer science courses complementing the standard university curricula. Alexander holds a Ph.D. from Steklov Mathematical Institute. His research interests include algorithms and complexity theory. He co-authored online courses "*Data Structures and Algorithms*" and "*Introduction to Discrete Mathematics for Computer Science*" that are available at Coursera and edX.

Pavel Pevzner is Ronald Taylor Chair and Distinguished Professor of Computer Science at University of California, San Diego. He was named Howard Hughes Medical Institute Professor in 2006. He was awarded? the Senior Scientist Award (2017) by the International Society for Computational Biology, and the Kanellakis Theory and Practice Award from the Association for Computing Machinery (2019). Dr. Pevzner authored textbooks "*Computational Molecular Biology: An Algorithmic Approach*", "*Introduction to Bioinformatics Algorithms*" (with Neal Jones), "*Bioinformatics Algorithms: an Active Learning Approach*" (with Phillip Compeau), and "*Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving*" (with Alexander S. Kulikov). He co-developed the *Bioinformatics* and *Data Structure and Algorithms* online specializations on Coursera (with nearly 935,000 enrolled learners), *Hacking COVID-19* MOOCs on Coursera, *Algorithms* MicroMasters Program on edX, and *Ace Your Next Coding Interview by Learning Algorithms through Programming and Puzzle Solving* on Stepik.