### Varvara (Var) Vasilchenko

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### **EDUCATION**

University of Maryland, College Park MD

Graduated May 2019

**Bachelor's Degree in Computer Science and Linguistics** 

GPA: 3.66/4.0

College Park Scholars Living and Learning Program Science, Discovery, and the Universe Program

Aug 2015 - May 2017

#### WORK EXPERIENCE

### MedStar National Center for Human Factors in Healthcare, Washington DC Research Analyst

Oct 2021 – Aug 2022

- · Developed software prototypes with HTML and Javascript to assist with analyses of medical documents
- · Developed machine learning algorithms using Doc2Vec and BERT to categorize adverse drug events for the FDA
- · Performed statistical analyses on medical data with Python

### Accenture Federal Services, Arlington VA

Sep 2019 - Mar 2021

**Software Engineer Analyst** with the Department of Education

- · Discussed technical solutions, performed data analyses, and developed deliverable products for the client
- · Developed a topic modeling solution to improve the studentaid gov virtual assistant using Word2Vec
- · Maintained client tool used for analyzing complaints related to financial aid
- · Performed sentiment analysis and topic model research on Reddit content related to financial aid

# MedStar National Center for Human Factors in Healthcare, Washington DC

Sep 2018 – Dec 2018

University Intern for Allan Fong, MS

- · Researched sentiment analysis tools to be used on documents written by medical professionals
- · Developed algorithm using BeautifulSoup to scrape news websites of mentions of the Center

## University of Maryland Language Science Center, College Park MD

Jan 2018 - Sep 2018

Technology Apprentice for Dr. Tess Wood

- · Maintained and developed Language Science Center website in Drupal and HTML
- · Created system of online applications to be used for the Center's Summer Field School
- · Developed interactive web application in JavaScript with use of Google Maps API

### University of Maryland Institute for Advanced Computer Studies, College Park MD Research Assistant under Dr. Marine Carpuat

Jun 2016 - Sep 2016

- · Researched the accuracy of word connotation detection through a graph-based algorithm
- · Wrote and worked with algorithm created in Python with use of NLTK and NumPy
- · Created a machine learning model to improve performance of algorithm
- · Ran algorithm on language data with Apache Spark

### RELATED SKILLS

Proficient in: SQL, Python, R, C, C++, Java

Experience with: Unix, Ruby, Assembly language, OCaml, Lisp, JavaScript, HTML

### RELATED COURSEWORK

Computer Science: Object-Oriented Programming, Intro to Artificial Intelligence, Discrete Structures, Advanced

Algorithms, Data Structures, Programming Language Technologies & Paradigms, Elementary

Theory of Computation, Intro to Data Science, Intro to Natural Language Processing

Linguistics: Language and Mind, Syntax I, Phonetics, Phonology I, Mathematical Approaches to

Language, Grammars & Cognition, Historical Linguistics, Topics in Psycholinguistics

Mathematics: Multivariable Calculus, Intro to Probability Theory

### LANGUAGES

Native speaker of: Russian, English