

# [ JULIA GARBUZ ]

Pursuing B.S. Computer Science | Seeking Full-Time Big Data/Software Engineering Role

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## [ EDUCATION ]

### Bachelors of Science, Computer Science

University of Minnesota, Minneapolis, MN — September 2015 – Present

B.S. in Computer Science (Big Data Focus), Minors in Statistics and Management

**Relevant courses:** Distributed Systems\*, Big Data Engineering and Analytics\* (NoSQL and Hadoop), AI, Algorithms & Data Structures, Database Systems, Operating Systems, Formal Languages & Automata Theory, Regression & Correlated Data, Time Series & Analysis\*

**Expected Graduation:**

December 2019

\* = Graduate-level course work

## [ EXPERIENCE ]

### [ INDUSTRY ]

#### Software Development Engineer Intern — May 2018 – August 2018

Expedia Group, eCommerce Platform, Financial Core Transaction Services (Chicago, IL)

- Created full-stack product, FORCE Echo, the first aggregated and business-user friendly view of the financial processing engine which processes over **1.5M transactions per day**.

- Designed an **Amazon Aurora** schema.
- Used **Spring Boot** to develop a **RESTful microservice**.
- Implemented **CI/CD pipeline** for the FORCE Echo microservice.
- Built an **Angular UI** for FORCE Echo.

FORCE Echo reduced the time engineers spent tracking down and resolving bugs in the financial system and provided business-oriented users with insights on month-end closures.

#### Technical Marketing Intern — June 2016 – August 2016

Dotcom Monitor (Minnetonka, MN)

- Designed and developed a pricing calculator in PHP/HTML essential to customer acquisition.
- Developed and marketed a scholarship program for Women in Computing.

### [ ACADEMIA ]

#### NSF/REU Undergraduate Research Fellow — June 2019 – Present

University of Minnesota, Dept. of Computer Science & Engineering (Minneapolis, MN)

- Assist Dr. Abishek Chandra's Distributed Systems Computing Group in developing "an edge-based framework for cooperation in internet of things applications".

#### Undergraduate Research Assistant — June 2019 – Present

University of Minnesota, Dept. of Computer Science & Engineering (Minneapolis, MN)

- Assist Dr. Maria Gini's "Grand Challenges" research project by developing a software toolkit for processing and analyzing raw physiological time series data.
- Assist Dr. Maria Gini and Dr. Serguei Pakhomov with preliminary work on developing a conversational agent training technology for the Minnesota Department of Human Services.

#### Instructor at Dr. Maria Gini's Summer Computing Academy — June 2019

University of Minnesota, Dept. of Computer Science & Engineering (Minneapolis, MN)

- Instructed 35 – 45 middle to high-school aged girls basic programming concepts as well as assisted with projects and labs using Python, Ozobots, Arduinos, etc.

#### Undergraduate Teaching Assistant — September 2016 – December 2018

University of Minnesota, Dept. of Computer Science & Engineering (Minneapolis, MN)

- Mentored students on course concepts (including guidance on approaching and debugging labs and homework) as well as on course selection and the technical interview preparation.
- Led laboratory sections of 30–40 students, attended weekly TA/instructor meetings, held office hours, and designed, reviewed, and graded assignments and exams.

**Courses taught:** Introduction to Computing and Programming Concepts (Python), Introduction to Algorithms and Data Structures (Java), Advanced Programming Principles (OCaml)

#### Undergraduate Research Assistant — May 2017 – August 2017

University of Minnesota, Dept. of Geography, Environment & Society (Minneapolis, MN)

- Assisted in the development of a domain-specific parallel computing language in Python.

### [ LEADERSHIP ]

#### Rhythmic Gymnastics Coach & Choreographer — August 2013 – Present

NorthWest Rhythmic LLC (Plymouth, MN)

- Organize and manage the training and development of over 50 young girls ranging from ages three to fifteen and skill levels ranging from beginner to National Team level.
- Develop, design, and manage both competitive and recreational programs to help each competitive gymnast excel and help young athletes develop strength, balance, coordination, and listening skills.

## [ SKILLS ]

### Programming Languages:

- Java
- Python
- C / C++
- OCaml
- HTML / CSS / Typescript
- SQL
- R
- Scala

### Frameworks/Tools:

- Git
- Spring Boot
- Swagger
- Angular
- Docker
- Jenkins
- Bootstrap
- npm
- Dask
- GCP
- AWS
- Apache Kafka
- Apache Thrift
- Apache Spark
- Hadoop/HDFS
- Apache Hive

### Languages

- Russian:** bilingual proficiency
- French:** elementary proficiency

### Miscellaneous

- Licensed Zumba Instructor:**  
ZIN Member since June 2016. Completed Basic 1, Zumba Kids, Zumba Kids Jr Trainings.

## [ PROJECTS ]

#### A Simple Distributed File System — April 2019

**Course Project:** Distributed Systems

- Using **Java** using **Apache Thrift**, implemented a simple DFS (using quorum-based protocol), and evaluated performance on different query-types and read/write quorum distributions.

#### Reddit Comment Sentiment Analysis — Oct. 2018

**Course Project:** Big Data Engineering and Analytics

- Designed, planned and built a data pipeline for ETL batch-processing of Reddit user and comment data into **JanusGraph** (on GCP) for analysis (via **Gremlin**).

## [ ACTIVITIES ]

### Girls Who Code @ UMN

- Vice President** of University of Minnesota chapter since December 2018

### Association for Computing Machinery (ACM):

- Member** since 2017
- MinneHack '18 Participant

### TechLadies@:

- Member** since 2018

### MIS Case Competition Team:

- Finalist at CaseIT 2018**, International MIS Case Competition, in Vancouver, Canada (finished in top 4 of 16 universities from 9 countries).
- Participant in UW Global Business Case Competition 2019 in Seattle, Washington.
- Assisted with recruitment (2018–2019): doubled number of applicants of previous year

### Rhythmic Gymnast:

- 4x USA National Team Member** (2010–2014)
- Many-time national and international medalist