# KAT GOMOZOVA

# Software Development Engineer



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# PROFESSIONAL SUMMARY

Passionate problem solver, software engineer and data scientist. 9+ years of engineering and software development experience with full life cycle development. Cover all areas of the stack including web development, data science, Machine Learning, Neural Networks and Artificial Intelligence. Strong communicator with skills in understanding requirements and solving ambiguous problems. Experienced leader in technical and functional roles.

# SKILLS AND TOOLS

Python - JavaScript - jQuery - HTML - CSS - TensorFlow - Keras - Scikitlearn - VisualStudio - Cloud
Computing - Big Data - Azure ML - Jupyter - Colab - Git - Bootstrap

## PROFESSIONAL EXPERIENCE

JACOBS ENGINEERING | BELLEVUE, WA | JUNE 2018 - PRESENT

- Developed a Neural Net using TensorFlow and Python to optimize usage of chemicals at water treatment plant with net result of 10% cost reduction.
- Automated hydrologic calculations, using Python, and improved processing time by 6x.
- Hands-on work for clients to deep dive into their historical operation and performance big data using Python.
- Developed classification model using Python and TensorFlow to determine the material source of the water pollutant.
- Built a Monte Carlo model using Python to evaluate 10K+ scenarios of partial and complete failure for Bellevue's water supply pipes in case of an earthquake.

COMPUTATIONAL HYDROLOGY - UNIVERSITY OF WASHINGTON | SEATTLE, WA | JAN 2018 - JUNE 2019

- Using Python, developed a predictive model based on multiple terabytes of data, to predict water supply and demand in the Seattle area over the next 50 years.
- Using Pandas and NumPy libraries estimated the range of total snow loss volume in the next 50-70 years.

KING COUNTY DEPARTMENT OF NATURAL RESOURCES & PARKS | SEATTLE, WA | DEC 2016 - MAY 2018

Prepared designs, sketches, design calculations, and incorporated them in the technical reports.

ECOPOLYMER GROUP CONSULTING ENGINEERS | KHARKIV, UKRAINE | NOV 2008 - MAR 2015

- Leveraged present net worth and life-cycle costs to complete economic analysis on equipment.
- Coordinated activities for design and construction teams.
- Ensured equipment suppliers submittals adhered to client specifications and listed equipment for customs.

## ADDITIONAL RELEVANT EXPERIENCE

#### Team Project | 2020

• Built an interactive web application using several third-parties APIs to check the nationality of movie celebrities based on their names.

## WiDS 2020 Datathon | Kaggle Competition | 2020

• Built a classifier to predict patient survival using 100's of features from first 24 hours of intensive care.

### TensorFlow Hackathon Project | Google | 2019

Developed a CNN for image processing and style transfer using TensorFlow Keras.

#### Earthquake computational tool | University Of Washington | 2018

• Using Python built a model to compute structure's seismic strength requirement based on its location, size, and soil type.

#### **EDUCATION**

Coding Bootcamp University of Washington, Seattle, WA, 2021 **B.S. Civil Engineering** University of Washington, Seattle, WA, 2019 M.S. Applied Economics Karazin Kharkiv National University, Ukraine, 2013 **TensorFlow in Practice** Coursera Certificate, 2019