

KAT GOMOZOVA



kathy.gomozova@gmail.com



www.linkedin.com/in/kgomozova



425-628-3959



github.com/kgomozova

PROFESSIONAL SUMMARY

Passionate problem solver with 9+ years of diverse industry engineering experience, with bachelors in Civil Engineering and masters in Applied Economics. Curious learner who has expanded programming, data science and ML knowledge based on professional work as well as personal projects ranging from simplescripting algorithms to applying DNN on large datasets. Proven track record of working backwards from customer value and applying novel approaches to ambiguous problem space. Led efforts ranging from inception to full life cycle by influencing divergent viewpoints across functional roles.

SKILLS AND TOOLS

- Python/Java ▪ HTML/CSS ▪ JavaScript ▪ Bootstrap ▪ VisualStudio ▪ Azure ML ▪ Jupyter / Colab ▪ Git
- TensorFlow/Keras/Scikitlearn

PROFESSIONAL EXPERIENCE

JACOBS ENGINEERING | BELLEVUE, WA | JUNE 2018 – PRESENT

- Developed a deep NN model to optimize usage of chemicals at water treatment plant with net result of 10% cost reduction.
- Automated hydrologic calculations with Python, improving manual processing time by up to 6x.
- Wrote Python script to automate and accelerate extraction and cleaning of the clients operation and performance data.
- Developed classification model in Python 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

- Wrote Python scripts to construct multiple scenarios, involving multiple terabytes of data, to predict water supply and demand in the Seattle area over the next 50 years.
- Developed a predictive model for future streamflow in Cedar River.
- 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.
- Maintained the schedule and budget for equipment procurement, supply, and installation.
- Ensured equipment suppliers submittals adhered to client specifications and listed equipment for customs.

ADDITIONAL RELEVANT EXPERIENCE

WiDS 2020 Datathon | Kaggle Competition | 2020

- Build a classification model using Python 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

- Developed a Python tool to compute structure's seismic strength requirement based on its locations, size, and soil.

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