

Files (reading and writing)

Working with files

Kunal Khurana

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```
apath = "cv_KK1.txt"

f= open (path, encoding = 'utf-8')

for line in f:
    print(line)
```

Kunal Khurana

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Google Scholar: [<https://scholar.google.com/citations?hl=en&user=wpX6SKUAAAAJ>]

Professional Summary

Detail-oriented researcher with a strong background in statistical analysis, machine learning

Skills

Data Science and Machine Learning: Python (NumPy, Pandas, SciPy, Scikit-learn), TensorFlow, R

Data Visualization: Matplotlib, Seaborn, Plotly, Power BI, Altair.

Database: SQL (PostgreSQL, MySQL), NoSQL.

NLP and Language Processing: Natural Language Processing algorithms, Neural Machine Translation.

Programming: Proficient in Python, software engineering principles, Flask.

Problem Solving: Strong analytical and problem-solving skills.

Communication: Effective communicator, capable of conveying complex technical concepts.

Continuous Learning: Committed to staying updated with the latest advancements in machine learning.

Professional Experience

Researcher

McGill University, Montreal, CA

September 2022 - December 2023

Conducted data analysis and research in the field of soil science, focusing on climate trends.

Developed predictive models using machine learning techniques.

Managed and analyzed large datasets using Python and SQL databases.

Collaborated with a multidisciplinary team to achieve research objectives.

Graduate Research Assistant

Université Laval, Quebec, CA

January 2019 - June 2022

Investigated the production of phenolics-rich biochar for controlling greenhouse gas emissions.

Managed and analyzed wetland datasets for Exploratory Data Analysis using Python.

Collaborated with a multidisciplinary team to optimize the production process, ensuring scalability.

Utilized advanced statistical techniques to identify key patterns and trends within the wetland data.

Contributed to research publications and presentations.

Research Fellow

Punjab Agricultural University, Ludhiana, IN

October 2016 - December 2018

Improved bio-efficacy of zinc in rice-wheat cropping systems to enhance grain quality and health.

Conducted surveys for observation, sampling, and mapping with ArcGIS.

Gained expertise in laboratory analysis using an Atomic Adsorption spectrophotometer for plant nutrient analysis.

Conducted statistical hypothesis testing using SPSS.

Prepared and submitted reports and presentations for the project.

Education

Master of Science in Soil Science

Punjab Agricultural University, Ludhiana, IN

July 2013- March 2016

Bachelor of Agriculture

Punjabi University Patiala, Patiala, IN

August 2009- May 2013

Volunteer Experience

Participant

Club d'IA, Quebec, CA

March 2021 - Present

Interests

Triathlon

Reading

Traveling

This functional CV highlights Kunal Khurana's skills, professional experience, education, and

```
lines = [x.rstrip() for x in open (path, encoding = "utf-8")]

lines

['Kunal Khurana',
 'Email: Khuranasoilpau@gmail.com',
 'Website: ilovesoils.com',
 'LinkedIn: [https://www.linkedin.com/in/khuranasoils/]',
 'GitHub: [https://github.com/Kkhurana007]',
 'Google Scholar: [https://scholar.google.com/citations?hl=en&user=wp6SKUAAAAJ]',
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'Traveling',
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```

```
f.close()
```

```
f1 = open(path)
```

```
f1.read(14)
```

```
'Kunal Khurana\n'
```

```
f2 = open (path, mode = 'rb') # binary mode
```

```
f2.read(14)
```

```
b'Kunal Khurana\r'
```

```
f1.tell()
```

```
15
```

```
f2.tell()
```

```
14
```

```
# check default encoding
```

```
import sys
sys.getdefaultencoding()
```

```
'utf-8'
```



```
f1.seek(3)
```

3

```
f1.read(1)
```

'a'

```
f1.tell()
```

4

```
f1.close()
```

```
f2.close()
```

```
# bytes and unicode with files
```

```
with open(path) as f:  
    chars = f.read(13)
```

```
chars
```

'Kunal Khurana'

```
len(chars)
```

13

```
f = open(path, encoding = 'utf-8')
```

```
f.read(5)
```

'Kunal'

```
f.read(1)
```

```
' '
```

```
f.seek(1)
```

```
1
```