```python
import requests
import pandas as pd
import xml.etree.ElementTree as ET
import bibtexparser
from scholarly import scholarly
from google.colab import files  # Import the files module for downloading (Google Colab specific)

def fetch_dblp_data(query, search_by="author", start_year=None, end_year=None):
    # DBLP search URL
    base_url = "https://dblp.org/search/publ/api"

    # Adjust the query to search by author
    query = f"author:{query}"

    params = {"q": query, "h": "100"}  # Adjust the number of results if needed

    # Make a request to the DBLP API
    response = requests.get(base_url, params=params)
    response.raise_for_status()  # Check for request errors

    # Extract publication details
    publications = []

    # Parsing XML
    root = ET.fromstring(response.content)

    for hit in root.findall(".//hit"):
        title = hit.find(".//info/title").text if hit.find(".//info/title") is not None else "N/A"
        authors = ", ".join(author.text for author in hit.findall(".//info/authors/author")) if hit.findall(".//info/authors/author") else "N
        year_hit = hit.find(".//info/year").text if hit.find(".//info/year") is not None else "N/A"
        doi = hit.find(".//info/doi").text if hit.find(".//info/doi") is not None else "N/A"
        journal = hit.find(".//info/journal").text if hit.find(".//info/journal") is not None else "N/A"
        booktitle = hit.find(".//info/booktitle").text if hit.find(".//info/booktitle") is not None else "N/A"
        pages = hit.find(".//info/pages").text if hit.find(".//info/pages") is not None else "N/A"
        publisher = hit.find(".//info/publisher").text if hit.find(".//info/publisher") is not None else "N/A"
        url = hit.find(".//info/url").text if hit.find(".//info/url") is not None else "N/A"

        # Choose journal or conference
        journal_conf = journal if journal != "N/A" else booktitle

        # Filter by year if a range is provided
        if (start_year and int(year_hit) < int(start_year)) or (end_year and int(year_hit) > int(end_year)):
            continue
        print(authors)
        publications.append({
            "Title": title,
            "Authors": authors,
            "Year": year_hit,
            "DOI": doi,
            "Journal/Conference": journal_conf,
            "Pages": pages,
            "Publisher": publisher,
            "URL": url
        })

    # Convert the data to a DataFrame
    return pd.DataFrame(publications)

def search_google_scholar_and_get_bibtex(query, search_by="author", start_year=None, end_year=None):
    # Modify the query for Google Scholar (Scholarly library)
    query = f"author:{query}"

    # Search for the author on Google Scholar
    search_query = scholarly.search_pubs(query)

    publications = []

    # Loop over the search results
    for i, pub in enumerate(search_query):
        if i >= 5:  # Limiting to the first 5 results for demonstration (adjust as needed)
            break

        # Extract publication details
        title = pub['bib'].get('title', 'N/A')
        authors = pub['bib'].get('author', 'N/A')  # This will get all authors
        year_hit = pub['bib'].get('pub_year', 'N/A')
```

```python
            journal_conf = pub['bib'].get('journal', pub['bib'].get('booktitle', 'N/A'))
            pages = pub['bib'].get('pages', 'N/A')
            publisher = pub['bib'].get('publisher', 'N/A')
            bibtex_link = pub.get('url_add_scholarbib', None)  # Google Scholar BibTeX link

            # Fetch and parse the BibTeX if a link is available
            if bibtex_link:
                bibtex_data = fetch_bibtex(bibtex_link)
                doi = bibtex_data.get('doi', 'N/A')  # Fetch DOI if available
            else:
                doi = 'N/A'

            # Filter by year if a range is provided
            if (start_year and int(year_hit) < int(start_year)) or (end_year and int(year_hit) > int(end_year)):
                continue

            # Append the publication details to the list
            publications.append({
                "Title": title,
                "Authors": authors,   # Including all authors
                "Year": year_hit,
                "DOI": doi,
                "Journal/Conference": journal_conf,
                "Pages": pages,
                "Publisher": publisher,
            })

    # Convert the data to a DataFrame
    return pd.DataFrame(publications)

def fetch_bibtex(bibtex_url):
    try:
        # Fetch the BibTeX content from the provided URL
        response = requests.get(bibtex_url)
        response.raise_for_status()  # Raise an error for bad responses
        bibtex_content = response.text

        # Parse the BibTeX content using bibtexparser
        bib_database = bibtexparser.loads(bibtex_content)

        # Return the first BibTeX entry (typically the only one in the file)
        if bib_database.entries:
            return bib_database.entries[0]
        return {}
    except requests.RequestException as e:
        print(f"Error fetching BibTeX data: {e}")
        return {}
    except Exception as e:
        print(f"Error parsing BibTeX data: {e}")
        return {}

# Prompt the user for author search
search_type = "author"

# Take author input from the user
query = input(f"Enter the {search_type} you want to search for: ")

# Ask for start and end year (optional)
start_year = input("Enter the start publication year (or press Enter to skip): ").strip()
end_year = input("Enter the end publication year (or press Enter to skip): ").strip()

# If start or end year is empty, set them to None
start_year = start_year if start_year else None
end_year = end_year if end_year else None

# Fetch data from DBLP
dblp_df = fetch_dblp_data(query, search_by=search_type, start_year=start_year, end_year=end_year)

# Search for the author and get publications from Google Scholar
google_scholar_df = search_google_scholar_and_get_bibtex(query, search_by=search_type, start_year=start_year, end_year=end_year)

# Merge the two DataFrames
combined_df = pd.concat([dblp_df, google_scholar_df], ignore_index=True)

# Save the DataFrame to an Excel file
filename = "publications_combined.xlsx"
combined_df.to_excel(filename, index=False)
```

```
# Download the Excel file to the local machine (Google Colab specific)
files.download(filename)
```

Enter the author you want to search for: rajesh
Enter the start publication year (or press Enter to skip): 2020
Enter the end publication year (or press Enter to skip): 2024
DEBUG:urllib3.connectionpool:Starting new HTTPS connection (1): dblp.org:443
2024-09-16 14:04:02 [urllib3.connectionpool] DEBUG: Starting new HTTPS connection (1): dblp.org:443
DEBUG:urllib3.connectionpool:https://dblp.org:443 "GET /search/publ/api?q=author%3Arajesh&h=100 HTTP/1.1" 200 15755
2024-09-16 14:04:03 [urllib3.connectionpool] DEBUG: https://dblp.org:443 "GET /search/publ/api?q=author%3Arajesh&h=100 HTTP/1.1" 200 15?
INFO:scholarly:Getting https://scholar.google.com/scholar?hl=en&q=author%3Arajesh&as_vis=0&as_sdt=0,33
2024-09-16 14:04:03 [scholarly] INFO: Getting https://scholar.google.com/scholar?hl=en&q=author%3Arajesh&as_vis=0&as_sdt=0,33
P. Rajesh, Praveen Kumar Gandla, D. S. Robinson Smart, Sunil Vasant Prayagi
P. Rajesh, R. Kavitha
M. Azhagiri, P. Rajesh
M. Susmitha, P. Rajesh
Vijaya Lakshmi Paruchuri, P. Rajesh
P. Annapandi, R. Ramya, N. C. Kotaiah, P. Rajesh, Arun Subramanian
V. Dhilip Kumar, P. Rajesh, Kemal Polat, Fayadh Alenezi, Sara A. Althubiti, Adi Alhudhaif
P. Rajesh, R. Kavitha
P. Rajesh, Mansoor Alam, Mansour Tahernezhadi, Monika A 0001, Gm Chanakya
P Rajesh, Mohammed Ismail. B, Mansoor Alam, Mansour Tahernezhadi, Monika A 0001
Rajesh P, Murugan A, Murugamantham B, S. Ganesh Kumar
P. Vijaya Laxmi, Rajesh P.
Mohammed Ismail. B, Mansoor Alam, Mansour Tahernezhadi, Hari Kiran Vege, P. Rajesh
P Rajesh, Bharadwaj, Mansoor Alam, Mansour Tahernezhadi
Rajesh P, Babitha D, Mansoor Alam, Mansour Tahernezhadi, Monika A 0001
P Rajesh, Mansoor Alam, Mansour Tahernezhadi, K. Vamshikrishna Reddy, K. Chandrakala
P Rajesh, Mansoor Alam, Mansour Tahernezhadi, C. Vikram, P. N. Phaneendra
Sathish Kumar, Chinthaginjala Venkata Ravikumar, Rajesh Anbazhagan, Vincent Omollo Nyangaresi, Giovanni Pau 0002, P. Srinivasa Varma
Jayashree Rajesh Prasad, Rajesh Shardanand Prasad, Amol V. Dhumane, Nihar Madhaw Ranjan, Mubin Shoukat Tamboli
Rajesh S. Prasad, Jayashree Rajesh Prasad, Bhushan S. Chaudhari, Nihar Madhaw Ranjan, Rajat Srivastava
R. Karthiga, Kumaravelu Narasimhan, Ravikumar Chinthaginjala, Rajesh Anbazhagan, Manikandan Chinnusamy, Giovanni Pau 0002, Kumar Satish
M. Rajesh 0001, Sitharthan Ramachandran, Krishnasamy Vengatesan, Shanmuga Sundar Dhanabalan, Sathees Kumar Nataraj
Manikandan Chinnusami, Chinthaginjala Venkata Ravikumar, S. B. M. Priya, Augusta Arumainayagam, Giovanni Pau 0002, Rajesh Anbazhagan, P
Aruna Animish Pavate, Rajesh Bansode, Parvathaneni Naga Srinivasu, Jana Shafi, Jaeyoung Choi 0001, Muhammad Fazal Ijaz
M. Renugadevi, Kumaravelu Narasimhan, Chinthaginjala Venkata Ravikumar, Rajesh Anbazhagan, Giovanni Pau 0002, Kannan Ramkumar, Mohamed /
S. Fouziya Sulthana, Cross T. Asha Wise, Chinthaginjala Venkata Ravikumar, Rajesh Anbazhagan, Idayachandran Govindanarayanan, Giovanni
Ramachandran Sitharthan, S. Vimal 0001, Amit Verma, Madurakavi Karthikeyan, Shanmuga Sundar Dhanabalan, Natarajan Prabaharan, M. Rajesh
Shankar Thangavelu, Rajesh Anbazhagan, Sivasankar Perumal, Eeswar Gopikrishna, Muppalla Siddartha
Anita Chaudhari, Rajesh Bansode
M. Rajesh 0001, Krishnasamy Vengatesan, Ramachandran Sitharthan, Shanmuga Sundar Dhanabalan, Mahendra Bhatu Gawali
Ramachandran Sitharthan, Rajesh M 0001, S. Vimal 0001, Eswaran Saravana Kumar, Yuvaraj S., Abhishek Kumar, I. Jacob Raglend, Krishnasamy
Kaveripaka Sathish, Chinthaginjala Venkata Ravikumar, Wooseong Kim, Anbazhagan Rajesh, Juan M. Corchado, Mohamed Abbas
Kaveripaka Sathish, Ravikumar C. V., Mohd Nadhir Ab Wahab, Rajesh Anbazhagan, Giovanni Pau 0002, Muhammad Firdaus Akbar
Monisha Selvaraj, Ramya Vijay, Rajesh Anbazhagan, Amirtharajan Rengarajan
Geoffrey Eappen, Shankar Thangavelu, Rajagopal Nilavalan, A. Rajesh 0001
Sahil Ashish Nimsarkar, Ruchir Raj Gupta, Rajesh Balliram Ingle
A. Jenice Prabhu, S. Vallisree, S. N. Kumar, Ramachandran Sitharthan, M. Rajesh 0001, A. Ahilan, M. Usha
Sahil Ashish Nimsarkar, Rajesh B. Ingle
Vaishali M. Joshi, Rajesh B. Ghongade, Aditi M. Joshi, Rushikesh V. Kulkarni
Shanmuga Sundar Dhanabalan, Sitharthan Ramachandran, Madurakavi Karthikeyan, Arun Thirumurugan, Rajesh M 0001, Sivanantha Raja Avaninat
Rajesh M 0001, Shanmuga Sundar Dhanabalan, Sitharthan Ramachandran
Geoffrey Eappen, John Cosmas, Shankar Thangavelu, A. Rajesh 0001, Rajagopal Nilavalan, Joji Thomas
Aruna Animish Pavate, Rajesh Bansode
Aruna Animish Pavate, Rajesh Bansode
Anita Chaudhari, Rajesh Bansode
Natarajan Nithiyanandam, Rajesh Manoharan 0001, Ramachandran Sitharthan, Shanmuga Sundar Dhanabalan, Krishnasamy Vengatesan, Madurakavi
Shubham Devidas Gujar, S. Fouziya Sulthana, Rajesh Anbazhagan
Vaishali M. Joshi, Rajesh B. Ghongade
A. Azhagu Jaisudhan Pazhani, Perumalsamy Gunasekaran, Vimal Shanmuganathan, Sangsoon Lim, Madasamy Kaliappan, Rajesh Manoharan 0001, Am
Kaveripaka Sathish, Chinthaginjala Venkata Ravikumar, Anbazhagan Rajesh, Giovanni Pau 0002
B. Rajalingam, Fadi M. Al-Turjman, R. Santhoshkumar, M. Rajesh 0001
Rajesh M 0001, Ramachandran Sitharthan
S. Velliangiri, Rajesh Manoharan 0001, Sitharthan Ramachandran, Vani Rajasekar
S. Velliangiri, Rajesh Manoharan 0001, Sitharthan Ramachandran, Krishnasamy Vengatesan, Vani Rajasekar, P. Karthikeyan 0004, Pardeep Kur
S. Shaffath Hussain Shakir, A. Rajesh 0001
A. Moshika, M. Thirumaran, Balaji Natarajan, K. Andal, G. Sambasivam, Rajesh Manoharan 0001
Vaishali M. Joshi, Rajesh B. Ghongade
Suresh Kumar Sudabattula, Velamuri Suresh, Natarajan Prabaharan, Ramachandran Sitharthan, M. Rajesh 0001
S. Shaffath Hussain Shakir, A. Rajesh 0001
S. Shaffath Hussain Shakir, A. Rajesh 0001
Visalakshi Annepu, Anbazhagan Rajesh, Kala Praveen Bagadi