

# PIPA: Pubmed Intelligent Personalized Assistant

## User Manual

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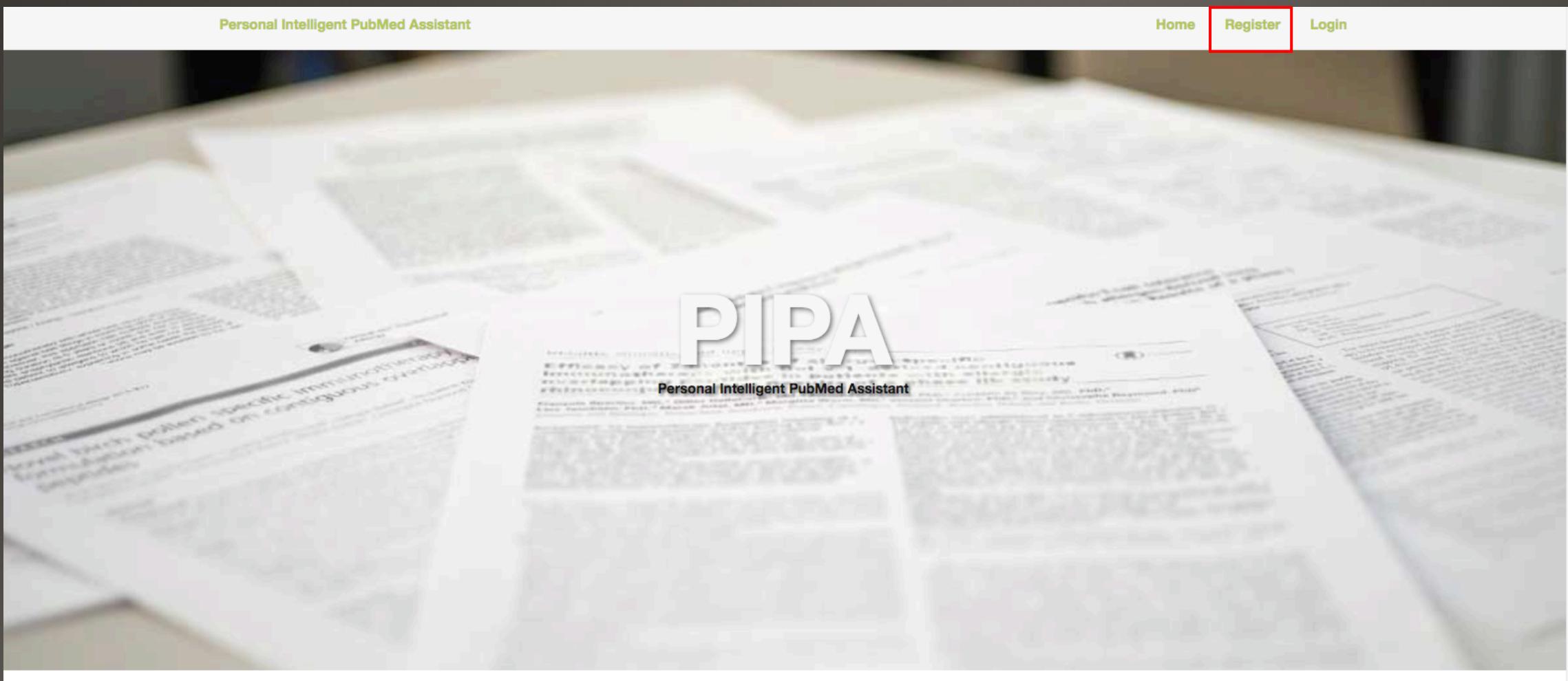
# 1. Introduction

- Welcome to PIPA (**PubMed Intelligent Personal Assistant**)
- Scientific researchers spend a lot of time to read literatures coming out in the field. Keeping up with the relevant papers is very important for designing experiments and writing grant proposals. As the largest collection of biomedical literature, Pubmed, comprises more than 26 million publications from life science journals and books. Although hundreds of millions of researchers depend heavily on Pubmed's update, its service seems to be too basic and not very user-friendly.
- Here, we built a literature recommendation system composed of a web crawler, a recommendation engine using TF-IDF and content-based filtering, a front end using Python Flask, and a MySQL database.
- This guide will introduce you to all of the features available. You will learn how to set up an account, manage your profile and retrieve the up-to-date paper recommendations from PIPA.

## 2. Table of Contents

- 1. Introduction
- 2. Table of contents
- 3. Register For a new account
- 4. Login
- 5. Add a new article to My List
- 6. Edit an article in My List
- 7. Delete an article from My List
- 8. Get article recommendations

### 3. Register For a new account



Go to <http://pipa.pythonanywhere.com/> and click on Register in the navigation bar

### 3. Register For a new account

Personal Intelligent PubMed Assistant

Home   Register   Login

#### Register for an account

Email

Username

First Name

Last Name

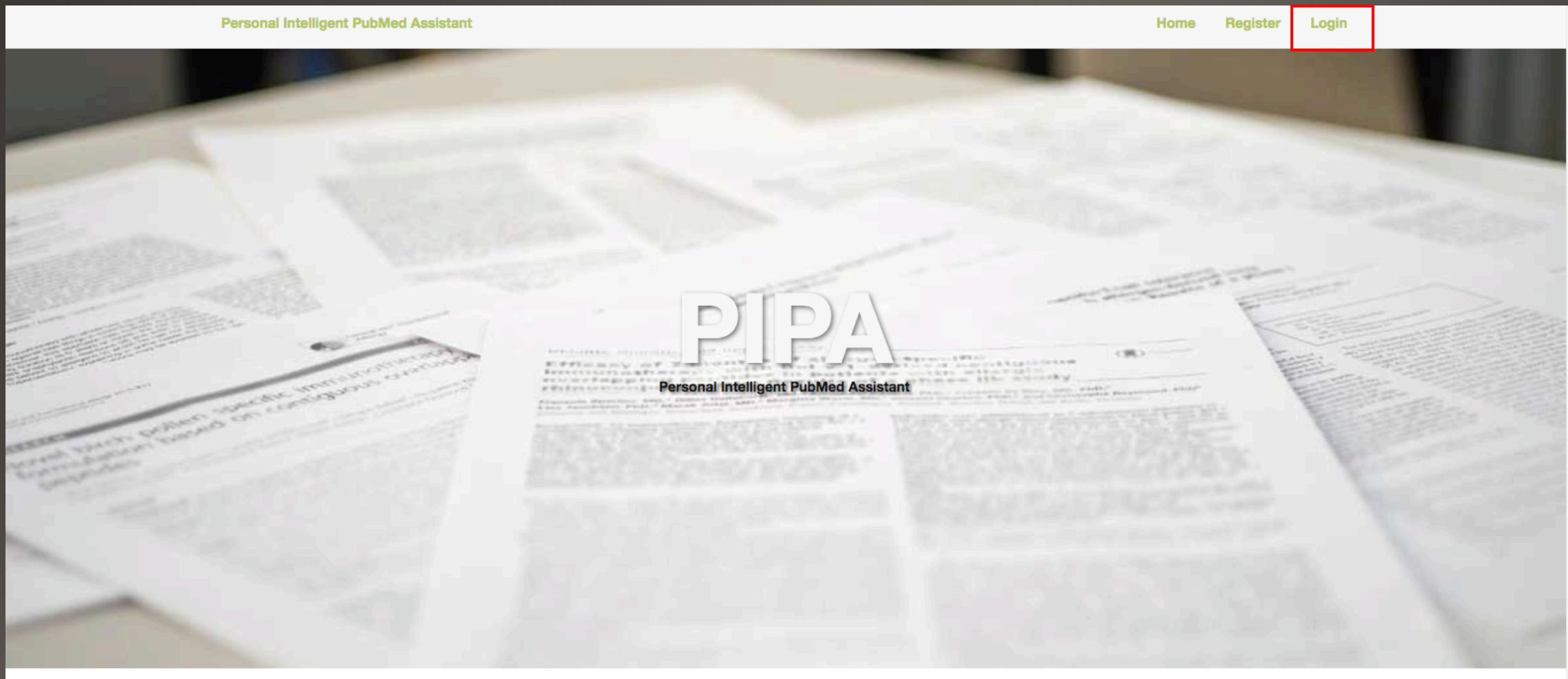
Password

Confirm Password

Home · Register · Login

Fill out all the information required, and click on the “Register” button

# 4. Login



Go back to the homepage and click on the "Login" button

# 4. Login

The screenshot shows a web-based login interface. At the top left is the site's name, "Personal Intelligent PubMed Assistant". To the right are three navigation links: "Home", "Register", and "Login". The main title "Login to your account" is centered above the form fields. There are two input fields: "Email" containing "li xu0818@gmail.com" and "Password" containing three dots (...). Below the password field is a "Login" button, which is highlighted with a red rectangular border. At the bottom of the page, there is a footer bar with links to "Home", "Register", and "Login", followed by a copyright notice: "Copyright © 2017. Contact: li xu0818@gmail.com".

Personal Intelligent PubMed Assistant

Home Register Login

## Login to your account

Email

li xu0818@gmail.com

Password

...

Login

Home · Register · Login

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Login with your email and password used for registration and press “Login”

# 5. Add a new article to My List

The screenshot shows a web application titled "Personal Intelligent PubMed Assistant". At the top, there is a navigation bar with links for "Recommendations", "My List", "Logout", and a user greeting "Hi, atest!". The main content area is titled "Your Articles" and features a table with columns for "ID", "Title", "Edit", and "Delete". Below the table is a button labeled "+ Add Articles", which is highlighted with a red box. At the bottom of the page, there is a footer with links for "Home" and "Logout", and a copyright notice: "Copyright © 2017. Contact: lixu0818@gmail.com".

The first time you login, there will be no paper in your list. Just press “Add Articles”

# 5. Add a new article to My List

## Add UserArticle

ID

Title

Description or Abstract

Just fill out the form to populate your list.

Notice that in the red box you can provide a paper's abstract or simply write your own research summary

# 6. Edit an article in My List

Personal Intelligent PubMed Assistant

Recommendations   My List   Logout   Hi, x!

## Your Articles

ID	Title	Edit	Delete
1	Rapid glucose depletion immobilizes active myosin V on stabilized actin cables	Edit	Delete
2	Inhibition of host vacuolar H <sup>+</sup> -ATPase activity by a Legionella pneumophila effector	Edit	Delete

Add Articles

[Home](#) · [Logout](#)

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Just click on the Edit button and fill out the form again.

# 7. Delete an article from My List

Personal Intelligent PubMed Assistant

Recommendations   My List   Logout   Hi, x!

## Your Articles

ID	Title	Edit	Delete
1	Rapid glucose depletion immobilizes active myosin V on stabilized actin cables	Edit	Delete
2	Inhibition of host vacuolar H <sup>+</sup> -ATPase activity by a Legionella pneumophila effector	Edit	Delete

Add Articles

[Home](#) · [Logout](#)

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Just click on the Delete button and the article will be removed from your list.

# 8. Get recommended articles

The screenshot shows a web application titled "Personal Intelligent PubMed Assistant". At the top, there is a navigation bar with links for "Recommendations", "My List", "Logout", and a user profile icon with the name "Hi, atest!". The main content area is titled "Articles You May Like" and displays the message "No readings today :)" below a horizontal line.

The first day you update your list, there is no recommendation,  
as PIPA updates itself (crawls Pubmed and analyzes paper) once a day at 2AM EST.

# 8. Get recommended articles

Personal Intelligent PubMed Assistant

Recommendations My List Logout Hi, xl

## Articles You May Like

Date	PMID	Title	Score
2017-03-23	<a href="#">28320280</a>	Molecular Mechanisms Mediating Involvement of Glial Cells in Brain Plastic Remodeling in Epilepsy.	0.162314
2017-03-23	<a href="#">28321386</a>	Computerized Assessment of Superior Semicircular Canal Dehiscence Size using Advanced Morphological Imaging Operators.	0.109768
2017-03-23	<a href="#">28320303</a>	Substrate-Specific Reduction of Tetrazolium Salts by Isolated Mitochondria, Tissues, and Leukocytes.	0.052481
2017-03-23	<a href="#">28321414</a>	Medical and Interventional Therapy for Spontaneous Vertebral Artery Dissection in the Craniocervical Segment.	0.048987
2017-03-23	<a href="#">28320607</a>	Diagnostic value of ST-segment deviations during cardiac exercise stress testing: Systematic comparison of different ECG leads and time-points.	0.048751
2017-03-23	<a href="#">28320399</a>	Vasculogenic mimicry signaling revisited: focus on non-vascular VE-cadherin.	0.027787
2017-03-23	<a href="#">28321857</a>	Academic apartheid and the poverty of theory: the impact of scholarly segregation on the development of sociology in the United States.	0.027655
2017-03-23	<a href="#">28320300</a>	Chronic Alcohol Intoxication Is Not Accompanied by an Increase in Calpain Proteolytic Activity in Cardiac Muscle of Rats.	0.027602

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Just be patient and wait for one more day,  
or take a look with our dev account: (Username: [tester@tester.com](mailto:tester@tester.com) Password: tester )

# 8. Get recommended articles

Personal Intelligent PubMed Assistant

Recommendations   My List   Logout   Hi, xl

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## Articles You May Like

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The recommendations are ranked by their similarity score,  
more paper can be view by scrolling down.

# 8. Get recommended articles

Personal Intelligent PubMed Assistant

Recommendations My List Logout Hi, xl

## Articles You May Like

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