

# Open Source @ TUM

TUM Developers

Visit us at [tum.dev](https://tum.dev)



whois TUM Dev

# 📍 NavigaTUM

## Rooms Data Mining

- All rooms since 1868
- API and Website

The screenshot shows the NavigaTUM website interface. At the top, there is a search bar with the text 'stzditum gurchin' and a 'Go' button. Below the search bar, the page displays 'Standorte / Garching Forschungszentrum / Maschinenwesen' and '5501.EG.101 (Fachschaft Masch)'. A map of the building is shown on the left, with a red location pin. On the right, there is a list of rooms under the heading 'Buildings / Sites' and 'StudiTUM Garching Gebäude'. The list shows 1 result for 'Rooms'.

Buildings / Sites

StudiTUM Garching Gebäude

1 result

Rooms

- 📍 5532.EG.002 (Lehr-/ Seminarraum) Garching, StudiTUM, 0.002@5532
- 📍 5532.EG.003 (Studierloungue) Garching, StudiTUM, 0.003@5532
- 📍 5532.Z1.001 (Emporenarbeitsplätze Foyer) Garching, StudiTUM, Z.001@5532
- 📍 5532.Z1.002 (Emporenarbeitsplätze Seminar) Garching, StudiTUM, Z.002@5532
- 📍 5532.Z1.003 (Emporenarbeitsplätze Lounge) Garching, StudiTUM, Z.003@5532
- 📍 5532.01.101 (Lernraum) Garching, StudiTUM, 1.101@5532
- 📍 5532.01.102 (Gruppenarbeitsraum) Garching, StudiTUM, 1.102@5532
- 📍 5532.01.103 (Gruppenarbeitsraum) Garching, StudiTUM, 1.103@5532
- 📍 5532.01.106 (Gruppenarbeitsraum) Garching, StudiTUM, 1.106@5532

approx. 83 results

Interactive Map Site Plans









# eat-api

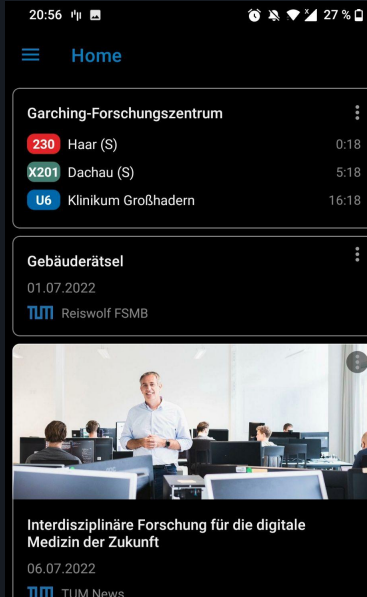
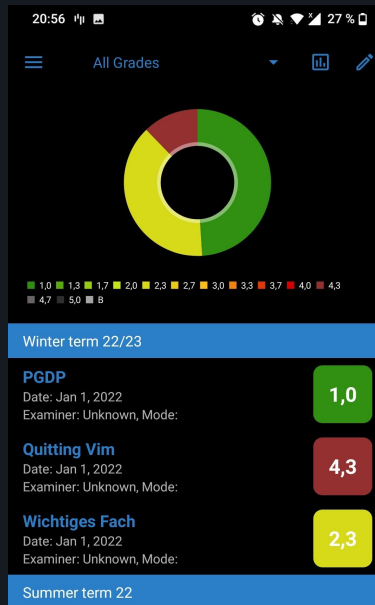
## Canteen Data Mining

- All dishes since 2017
- JSON API

Mensa Garching	
ed from 11:00 to 14:00	
Price (students)	
ese and melted onions	0.80€/100g
	4.00€
	0.50€ + 0.80€/100g
	0.80€/100g
	0.33€/100g
	0.33€/100g
uce	1.00€ + 0.80€/100g
	0.80€/100g
Mashed potatoes	0.80€/100g
Parsley potatoes	0.80€/100g
Basmati rice	0.80€/100g
Fresh vegetables daily	0.80€/100g

# Apple Android Campus App

-  Lectures
-  Grades
-  Calendar
-  Canteens
-  TUM News
-  Departures
- ...



20:56 27%

Home

Garching-Forschungszentrum

- 230 Haar (S) 0:18
- X201 Dachau (S) 5:18
- U6 Klinikum Großhadern 16:18

Gebäuderätzel

01.07.2022

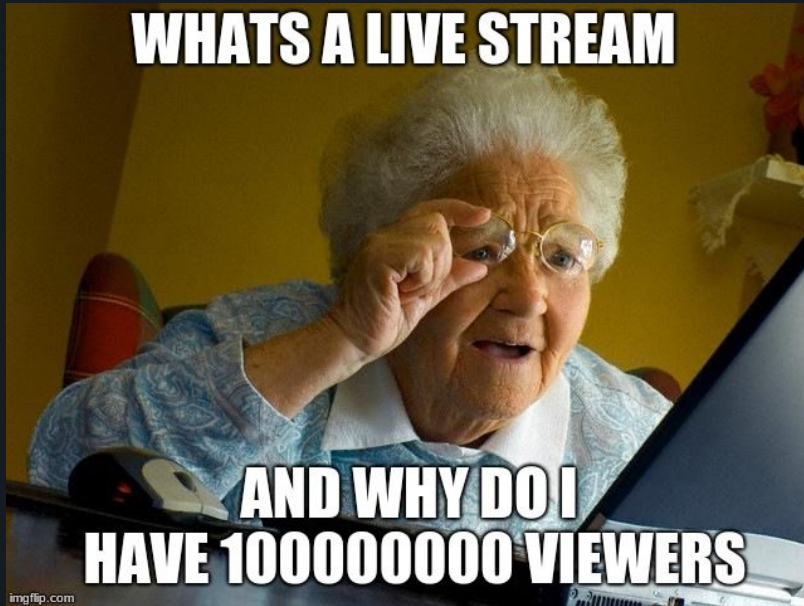
TUM Reisswolf FSMB

Interdisziplinäre Forschung für die digitale Medizin der Zukunft

06.07.2022

TUM TUM News

# TUM-Live



- Watch lectures online
  - Live streams
  - Recordings
  - Chat
- Used for most larger CS, Maths and Physics lectures

TS





SEXY  
TIME!



# Be Sexy, tum.sexy!



All your Redirects

So you can save 5 seconds googling for it!



Discover Helpful Stuff

The screenshot shows the TUM.sexy website interface. At the top right is the logo 'TUM.sexy' with a star icon. Below it is a search bar with the placeholder text 'Search'. The main content is divided into two sections: 'PINNED' and 'REDIRECTS'. The 'PINNED' section has a sub-header 'PINNED' and a note: 'Pin your favourite links here for quick access! When using this feature, we store cookies on your device!'. It contains three pinned items: 'Einführung in die Informatik 1' with a link to 'info1.tum.sexy', 'Diskrete Strukturen' with a link to 'ds.tum.sexy', and 'Carlos Camino' with a link to 'carlos.tum.sexy'. The 'REDIRECTS' section has a sub-header 'REDIRECTS' and a note: 'No need for remembering long and ugly urls or bookmarks - Just use these redirects!'. It is divided into two columns: '1. SEMESTER' and '2. SEMESTER'. Under '1. SEMESTER', there are two items: 'Einführung in die Informatik 1' with a link to 'info1.tum.sexy' and 'Praktikum Grundlagen der Programmierung (Moodle-Kurs)' with a link to 'pgdp.tum.sexy'. Under '2. SEMESTER', there are two items: 'Einführung in die Softwaretechnik' with a link to 'eist.tum.sexy' and 'Grundlegende Algorithmen und Datenstrukturen' with a link to 'gad.tum.sexy'.

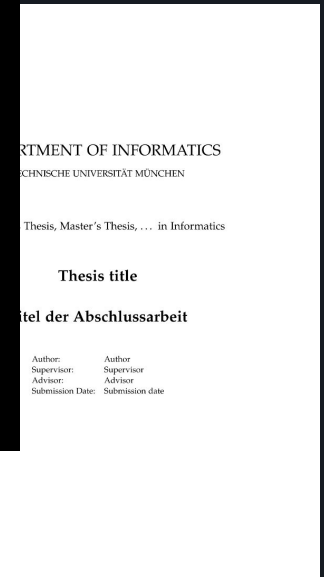
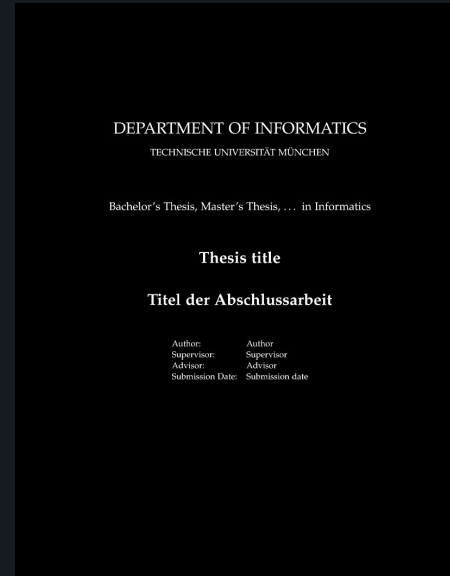




# Template for TUM Theses

Make your thesis great (again)

-  Dark Mode
-  Light Mode



# Facts



- Around for 10+ years
- several thousand active users
- Excellent<sup>TM</sup>® companion apps for TUM students
- 10ish active developers
- Cover all areas: iOS, Android, Web, and Backend

We  Open Source

 [tum.app](https://tum.app)

# Limits of Open Source

# Maintainer burnout

- Small project gain major popularity overnight
  - No processes available to funnel work
  - “Wanting to please everyone” syndrome
- Funding / single people vs. entire teams
- Automatically generated patches are making this worse
- Managing expectations with OS projects is hard

> Torvalds said that, while the community gets a lot of new contributors, it doesn't tend to get many new maintainers. The contributor and maintainer roles should be separated, he said.

From [Reducing kernel-maintainer burnout](#) on lwn.net

# Companies and Open Source

- Open Source itself is not a business strategy
  - Licensing hell (Terraform, Redis, etc.)
  - Developers need to eat
- Motivation not clear when “for-profit company”?
  - User / customer trust
- => Lots of foundations that host software
  - Apache / Linux foundation
  - Cloud Native Computing Foundation (CNCF)
  - [Others](#)

# Google

- [Android Open Source Project](#)
- [Chromium](#)
  - [ChromeOS](#)
- [github.com/google](https://github.com/google)
  - Over 2700 repositories, some actively maintained
- Not anymore: [Kubernetes](#) ([first commits](#))



# Projects I've been involved in

- [github.com/google/googet](https://github.com/google/googet)
- [github.com/google/go-patchutils](https://github.com/google/go-patchutils)
- Internal systems work very differently
- Doing open source is actually harder for me today
- Not a lot of benefits that would drive more os-work

So is everything bad?

# Clearly: no!

- Open Source is a fantastic learning opportunity.
- OS allows anyone to understand why something might be broken.
- OS encourages collaboration.
- Technology like Android builds upon the Linux kernel.
  - Only possible because Free Software exists?

# Other Benefits of OS

- Transparency
- Security
- Flexibility / Forking
- Crowdsource ideas and work



# Answers!