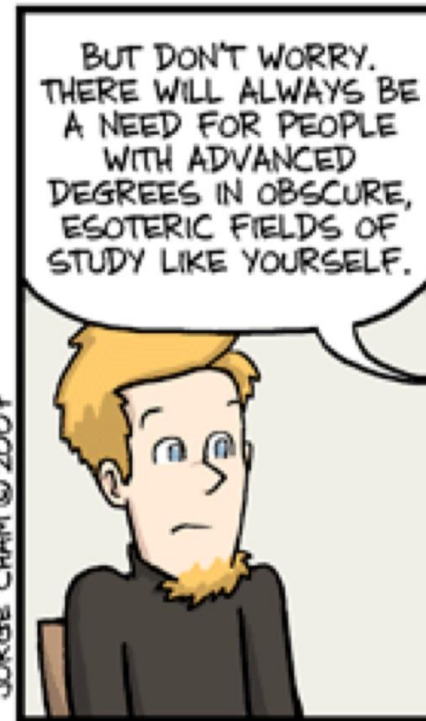# Life after the PhD

Enrico Rukzio

Institute of Media Informatics

Faculty of Engineering, Computer Science and Psychology

University of Ulm

March 15 2018

Sources

- „Einstieg in die (deutsche) akademische Karriere … oder: Wie komme ich an einen Ruf?", Andreas Butz,

  http://www.cip.ifi.lmu.de/~butz/enjt/Workshop-Ruf.pdf

- Life during and after your PhD. David Dobbelstein. 2017.

- Berufungsverfahren. Wiltrud Christine Radau. Deutscher Hochschulverband.

Academia vs. Industry

Academia from an Industry perspective   Industry from an Academia perspective

The reality for both

Research in Progress
http://researchinprogress.tumblr.com/post/35472361647/industry-vs-academia

Academia	Industry
Time flexibility	Location flexibility
Private office	Money
External credit	Coworker camaraderie
Sense of control	Directness of effort
Independence	Directness of impact

Philip J Guo
http://www.pgbovine.net/academia-industry-junior-employee.htm

Statistics ("my" former "successful" fellow PhD students)

- Ottmar Hilliges → Prof. at ETH Zurich

- Andreas Pleuss → Senior Software Engineer at EnCo Software GmbH

- Richard Atterer → Google Zurich

- Lucia Terrenghi → Senior Staff UX Manager at Google

- Arnd Vitzthum → Prof. at Dresden University of Cooperative Education

- Matthias Kranz → Prof. at University of Passau

- Paul Holleis → Research Specialist at DOCOMO Euro-Labs

- Enrico Rukzio → Prof. at University of Ulm

- 50% industry (mainly research and innovation driven) / 50% academia

Statistics ("my" former PhD students)

- Robert Hardy → Principal Engineer at Jaguar Land Rover

- Julian Seifert → Patent Examiner at European Patent Office

- Christian Winkler → Senior Project Manager for Advanced Visual Solutions at Daimler Protics

- David Dobbelstein → Carl Zeiss Corporate Research and Technology

→ 100% industry (mainly research and innovation driven)

Computer science in industry

- Could be:

  – research and development in a company

  – software development

  – ux/usability design

  – project management

- HCI in German industry, unfortunately often still in its infancy

- Better at Apple / Facebook / Google / Microsoft / etc. ?

- It depends. (-:

Computer science in industry

- Siemens: 17.500 Software Developer,

  44% of open positions related to computer science

- BMW: 29% of open positions related to computer science

- Daimler: 26% of open positions related to computer science

- Philips: 25% of open positions related to software

- Zeiss: 20% of open positions related to computer science

  and 22% of open positions related to software

- Thyssen: 11% of open positions related to computer science

- Voith: 9% of all open positions related to computer science

Plenty of opportunities

StepStone

🔍 Informatik

3093 Treffer für **Informatik** Jobs in **stuttgart** in 50 km Umkreis

3153 Treffer für **Informatik** Jobs in **München** in 50 km Umkreis

656 Treffer für **Informatik** Jobs in **ulm** in 50 km Umkreis

Get aware of why a company should employ you

- Unlikely that you get employed as an overpaid programmer

- What is your skillset? most likely…

  - to solve problems and to see and analyze opportunities, resp. properties

  - being able to profoundly study a topic in depth

  - willing to learn new stuff (endurance)

  - independent work

  - manage projects

  - developing and seeing a vision, rather than only living in the now

- HCI is an important part in product development. Most companies are slowly becoming aware. Media Informatics is a new field in Germany (10-15 years).
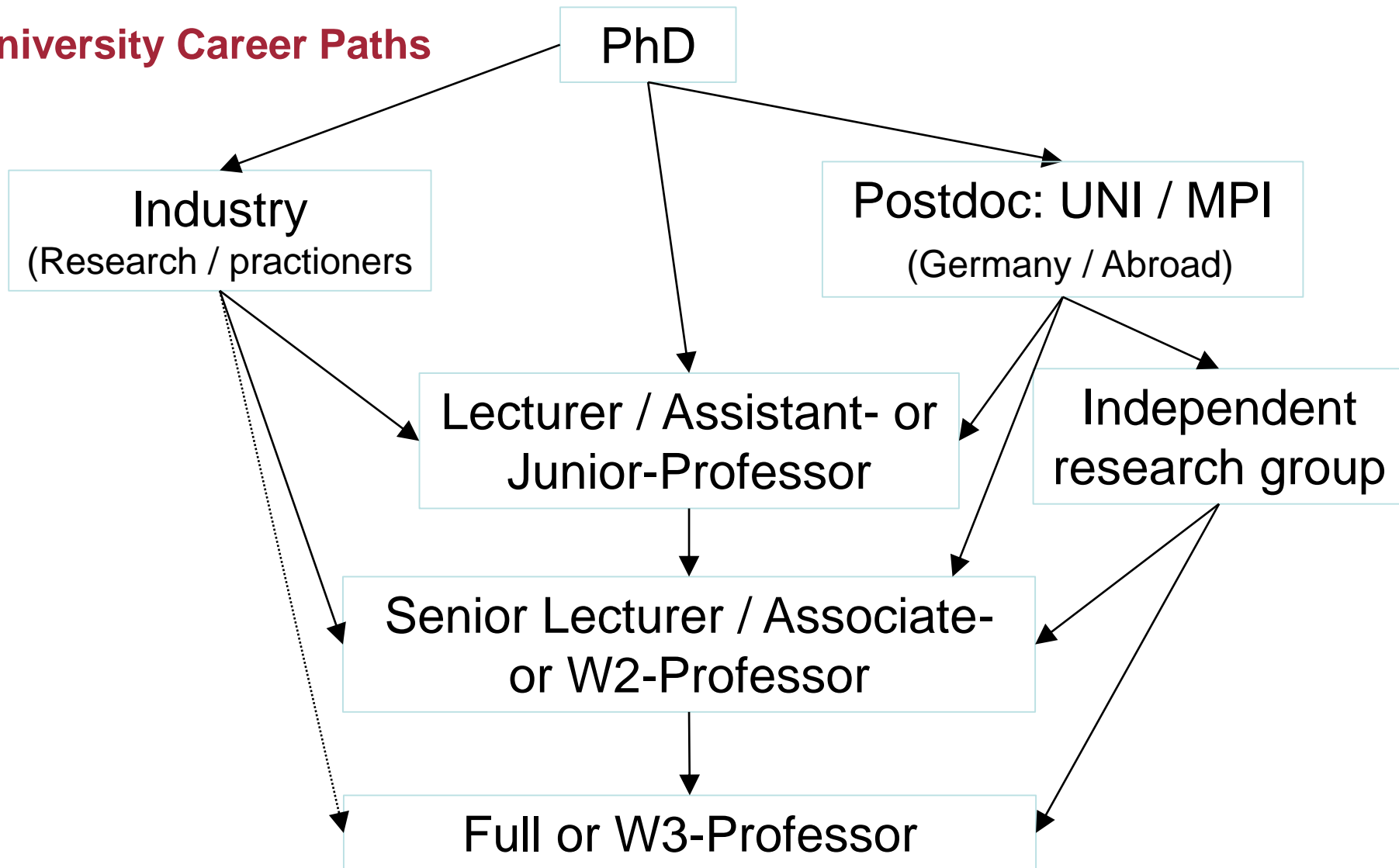
How to become a Full Professor?

University Career Paths

PhD

Industry
(Research / practioners

Postdoc: UNI / MPI
(Germany / Abroad)

Lecturer / Assistant- or
Junior-Professor

Independent
research group

Senior Lecturer / Associate-
or W2-Professor

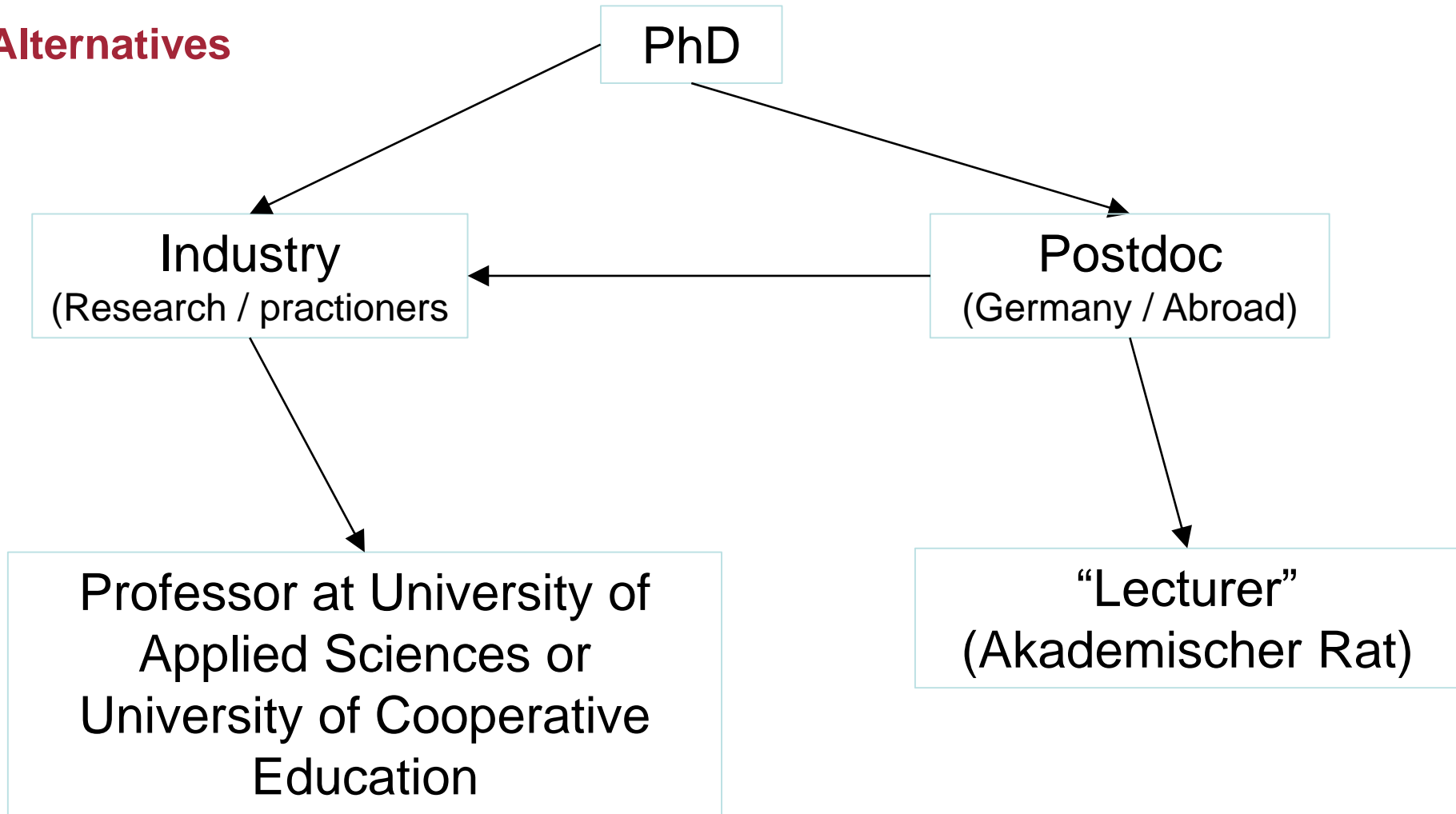Full or W3-Professor

Habilitation?, Startup?

How to become a tenured professor?

1. PhD (4-6 years)   **<- you are here**

2. PostDoc (2-6 years)

3. Lecturer / Assistant Professor / Juniorprofessur (max 6 years)

4. Senior Lecturer / Associate- or W2-Professor

5. Full or W3-Professor (typically not much older than 40-45)

- emancipate from your supervisor

- climb the ladder as fast as possible (-:

- every step is often at a different institute / location (German system)

How to become a tenured professor?

- Number of open faculty positions are very limited in Germany / Austria / Switzerland: 3-10 per year)

- Large number of lecturer / (tenured) assistant professor positions in US / Scandinavia / UK / Ireland / Denmark / Netherlands / Belgium

Alternatives

PhD

Industry
(Research / practioners

Postdoc
(Germany / Abroad)

Professor at University of Applied Sciences or University of Cooperative Education

"Lecturer"
(Akademischer Rat)

Schedule

- Job post (incl. application deadline), circa 20-40 applications

- Presentation and interview, circa 6-8 candidates

- Appraisal, circa 3-4 candidates

- Hiring list, typically 2-3 candidates

- Job offer

- Negotiations

Process might last 3 Months (abroad) or 1-2 years (Germany)

"Statistics form" for an application at Ulm University

- University degrees (kind: MSc, PhD, habil; date; location)

  $\rightarrow$ Performance: PhD in 4 years vs. 10 years, reputation of university

- Publications in journals, conferences / workshops, books (as author and first author), Bibliometric data (Google Scholar h-index)

  – First author (!), journals / books ?, "conferences / workshops", h-index

- Top 5 Publications

  – 5 not 10 or 50, co-authored with your PhD supervisor ?

- Research Focus

- Research visits abroad (!)

- Number of supervised dissertations

"Statistics form" for an application at Ulm University

- Acquired third party funding (money source, sum, number of positions, duration): as principal investigator / as co-investigator

  – Money sources (DFG / ERC ?), sum, positions, principal investigator (independence)

- Stipends, additional qualifications

- Teaching experience (title, content, volume, frequency)

  – When working in industry?, independence ?

- Supporting self-management of the University

Official criteria of the committee (University of Stuttgart)

- Formal requirements

    - Finished Master degree & PhD

    - Pedagogical qualifications (teaching experience, evaluations)

- Further requirements

    - Scientific qualification

    - Didactic / pedagogical competence (teaching example, student council)

    - Fit to job post (!)

    - Amplifying and improving local (!) teaching and research

    - Management and gender competence

    - Experiences with acquiring third party funding

    - International research and teaching experience

    - Interdisciplinary cooperation (!), heading larger research initiatives (!)

The ideal committee

- Professors: 2 media informatics professors you know, 2 psychology professors in a related field, 1 distributed systems professor, 1 databases professor, 1 neuro informatics professor, 1 artificial systems professor

- PhD students: research in HCI

- Students (1-2): study media informatics with focus on HCI

- 1 Professor from another faculty: somebody who is very interested in HCI

- External professor : somebody in your field you know very well

- Equal opportunities representative: interested in HCI

The "realistic" committee

- Professors: 1 theoretical computer science professor, 1 distributed systems professor, 1 databases professor, 1 operating systems professor, 1 embedded systems professor, 1 software engineering professor

- PhD students: somebody in your field you don't like

- Students (1-2): studies theoretical computer science

- 1 Professor from another faculty: somebody who is not interested

- External professor : somebody in your field who is from another community

- Equal opportunities representative: somebody

The committee

- Most of the members are <u>not</u> experts in the field (you might be the first HCI professor in the faculty)

- Dominated by 2-3 Persons

- Good to know beforehand who is in the committee (call)

- Be a member in a committee (as a PhD student or Postdoc)

PostDoc / Assistant Professor: ToDo

- Do fantastic research (paper, community: workshops / reviews / PC member, networking) → something many can do

- Show independence in research (publish without your PhD supervisor) and teaching ("Lehrauftrag", external teaching) → something many can do

- External funding (DFG Erstantrag / Emmy Noether, EPSRC New Investigator Award, ERC Starting Grant)
  → accelerator

- Postdoc abroad / postdoc in top industry research lab / research visits
  → accelerator

- Criteria for becoming a professor <u>are different from</u> the ones for getting a PhD! → external training, network / PhD supervisor (!)

Karriere und Berufung

DEUTSCHER HOCHSCHUL VERBAND

Köpfe die Wissen schaffen

ZURÜCK ZUR HAUPTSEITE

DHV-Seminare
Themen
Termine
InHouse-Seminare
Coaching
Referentinnen/Referenten
FAQs
Über uns
Kontakt

DHV Seminare

LEITER PROJEKTMANAGEMENT

Dr.phil. Ulrich Josten
Rheinallee 18-20
53173 Bonn
Tel.: 0228/902 66-34
Fax: 0228/902 66-97
E-Mail:
josten(at)hochschulverband.de

Karriere und Berufung

Wie werde ich Professorin/Professor?

Seminar

Termine

Inhalte

Zeitplan

Evaluation

Teilnahmegebühr

Anmeldeformular

8 hours course

https://www.hochschulverband.de/887.html#_

Begutachtung von Bewerbungsunterlagen

Im Rahmen von Personalauswahlverfahren an Hochschulen und Forschungseinrichtungen sind die schriftlichen Bewerbungsunterlagen von Wissenschaftlern - vom Anschreiben bis zur Publikationsliste - der erste Grundstein für einen erfolgreichen Bewerbungsauftritt. Unvorbereitete Bewerber laufen Gefahr, durch die Missachtung hochschul- und fachspezifischer "dos"und "don'ts" bereits in der Vorauswahl zu scheitern. Eine schriftliche Bewerbung um eine Stelle oder eine Professur muss professionell gestaltet sein.

Der Deutsche Hochschulverband bietet an, die Bewerbungsunterlagen von Wissenschaftlern durch einen Professorenberater einer kritischen Prüfung zu unterziehen, sie zu begutachten und weiterführende Hinweise zu geben.

Gebühr: EUR 120,- zzgl. MWSt.

https://www.hochschulverband.de/coaching0.html#c6182

5 hours course

https://www.hochschulverband.de/630.html#_

Statistics of an average full professor

- 26 Applications (2-3 per year)

- 18 Invitations (1-2 per year)

- 7 Offers