

Sebastian Wilzbach

Seidelbaststraße 12
80939 Munich
Germany

✉ seb@wilzba.ch
🌐 seb.wilzba.ch
☎ +49-176-62771500
🐙 github.com/wilzbach
🐦 twitter.com/swilzbach
🔑 pgp.wilzba.ch/seb.asc



Personal details

Date of birth 1994-07-04 in Kempten, Bavaria, Germany

Education

- 10/2016 – 04/2018 **Graduate studies in Bioinformatics**, Ludwig Maximilian University of Munich and Technische Universität München (TUM)
Exmatriculated in 2018
- 08/2015 – 05/2016 **Erasmus scholarship**, University of Helsinki
Algorithmic Bioinformatics, Algorithms, Data Analytics and Machine Learning
overall average grade: 1.15/5.0 (A)
- 10/2012 – 08/2016 **Undergraduate studies in Bioinformatics**, Ludwig Maximilian University of Munich and Technische Universität München
Bachelor thesis: *Improving haplotype assembly runtime by read pruning*
- Informatics subprogram: fundamental and higher Mathematics & Computer Science
 - Biology subprogram: advanced Biology, Chemistry & Biochemistry
 - Combined subprogram: Algorithmic Bioinformatics, High-throughput data mining, Machine Learning
- overall average grade: 2.2/5.0 (B)
- 2011 – 2012 **Early study: Computer Science I + II**, University of Applied Sciences, Kempten
overall average grade: 1.0/5.0 (A)
- 2004 – 2012 **Abitur (German higher education entrance qualification)**, Allgäu-Gymnasium, Kempten, scientific track
overall average grade: 1.8/6.0 (A)

Work experience

- 11/2017 – **Consultant, D Language Foundation**
Supporting the D language and ecosystem
- 11/2016 – 12/2017 **Junior consultant, TNG**
Deep learning in a corporate environment
- 07/2016 – 10/2016 **MOOC teaching assistant, edX, TUM**
"Developing a web app with the power of Node" (exercises, grading)

- 04/2016 – **Google Summer of Code stipend**, *D Language Foundation*
- 08/2016 Science for D: non-uniform random number generators
- 07/2015 – **Fintech co-founder & consulting**, *Bonaval*, Munich
- 03/2016 First comparison site for pawn credits in Germany (AngularJS, NodeJS)
- 04/2015 – **Predictive analytics student employee**, *metoda*, Munich
- 07/2015 Analysis of historic e-commerce pricing data (Amazon, idealo) (R, Ruby)
- 04/2014 – **Google Summer of Code stipend**, *BioJavaScript*
- 08/2014 Interactive multiple sequence alignment viewer and BioJS.io (CoffeeScript, JavaScript, NodeJS)
- 05/2013 – **Student employee**, *Rostlab (TUM)*, Munich
- 08/2013 "The Bioinformatics game" (tbg) for iOS and Android (C++)
- 02/2013 – **IT Consulting internship**, *Jato GmbH*, Munich
- 04/2013 LDAP login system & internal time tracking system (Java)
- 11/2012 – **Software developer student employee**, *fortiss (An-Institut Technische Universität München)*, Munich, project: smart energy living lab
 - Distributed RPC communication via an enterprise message bus (Java, Python)
 - Device manager with data aggregation (Java)
- 08/2011 & **Software developer vacation job**, *3S-Smart Software Solutions GmbH*, Kempten
- 06/2012
 - 2012: Visualization of the in-house solar power production (PLC)
 - 2011: Internal RFID payment system with stock monitoring (PLC)

Scientific experience

Teaching

- 10/2014 – **Protein Prediction II**, *Teaching assistant*
- 03/2015 Department for Bioinformatics and Computational Biology, Technische Universität München

Publications

- 07/2017 Veli Mäkinen, Valeria Staneva, Alexandru Tomescu, Daniel Valenzuela, **Sebastian Wilzbach** "Interval scheduling maximizing minimum coverage" in *Discrete Applied Mathematics*
- 07/2016 Guy Yachdav, **Sebastian Wilzbach** et al. "MSAViewer: interactive JavaScript visualization of multiple sequence alignments" in *Bioinformatics*
- 07/2015 Guy Yachdav, Tatyana Goldberg, **Sebastian Wilzbach** et al. "Anatomy of BioJS, an open source community for the life sciences" in *Elife*
- 10/2014 Markus Duchon, Pragya Kirti Gupta, Dagmar Koss, Denis Bytschkow, Bernhard Schätz, and **Sebastian Wilzbach**. "Advancement of a Sensor Aided Smart Grid Node Architecture" in *International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery*

Invited talks & workshops

- 07/2015 **GCC2015**, *Norwich, England*, BioJS2Galaxy: Automatic Conversion of BioJS Visualisation Components into Galaxy Plugins (talk)
- 07/2015 **BioJS Conference 2015**, *Norwich, England*, Web components and BioJS (talk)

- 03/2015 **VizBi 2015**, *Cambridge, MA, United States*, Reuse, develop and share biological visualization with BioJS (workshop)
- 11/2014 **EMBL-EBI industry programme**, *Cambridge, England*, EMBL-EBI industry workshop on BioJS (workshop)
- 10/2014 **Swiss-German Galaxy developer day**, *Freiburg, Germany*, Reusable JavaScript for Life Sciences (talk)
- 09/2014 **ECCB 2014**, *Strasbourg, France*, Reuse, develop and share biological visualisation with BioJS (workshop)
- 08/2014 **TGAC**, *Norwich, England*, BioJS 2.0: Taking biological visualisation to the next level (talk)

Entrepreneurship

- 07/2015 **Bonaval**, First comparison site for pawn credits in Germany
- 10/2014 **OpenVis**, Interactive web visualization
- 01/2012 **Substi**, Substitution schedule app for iOS and Android
- 07/2010 **Campoweb**, Server hosting & WebCMS configuration

Programming skills

Mother lang.	D, Python, (Node)JS/ECMAScript, Java	<i>"C2" level</i>
Stat. typed	C, C++, Go	
Scripting	Bash/Zsh, Perl, Ruby, PHP	
Functional	Scala, Haskell, Clojure	
Statistical	R, GNU Octave	
Databases	SQL, NoSQL	
Frontend	React, Angular, Backbone	

OS skills

- Arch Linux AUR package maintainer (since 2013)
- Debian/Ubuntu server admin (since 2012)

Selected open source contributions

- Phobos
- Mir
- BioJS & Bionode
- Underscore.js
- Epilogue
- Parallel.js
- Mention-bot
- Sequelize

Selected hackathons awards

- 04/2017 **Hex**, *Eindhoven, Netherlands*, WehStyle: style or get styled, 1st place (overall)
- 11/2016 **Accenture Digital hackathon**, *Prague, Czech Republic*, refood: sharing reusable food leftovers, 3rd place (overall)
- 11/2016 **hackaTUM**, *Munich, Germany*, PitchBack: audience attendance observation, 1st place (wildtrack)

Language proficiency

German	Mothertongue	
English	C2	<i>German academic exchange service (DAAD), 2015</i>
Latin	Latinum	<i>Advanced Latin proficiency certificate</i>
Finnish	A1.2	<i>Elementary</i>

Post-qualification experience

- 2016 – D Munich Meetup organizer
- 2014 – TUM MINGA mentor (for incoming exchange students)
- 2015 Executive member of MunichACM (Computer Science student club)
- 2014 – 2015 Contributor to TeaTalk (scientific discussions between students and academic professionals)
- 2012 – 2015 Founding member of the Munich humanist university group (HHGM)
- 2013 – 2014 Comenius program assistant (I.E.S. Poeta García Cabrera, La Gomera, Spain)
- 2012 Voluntary worker for the Bavarian Red Cross (ambulance service)
- 2007 – 2012 Multimedia task force leader at Allgäu-Gymnasium Kempten

Personal interests

- Middle distance running
- Hackathons/codefests
- Bouldering
- Open source philanthropy

Munich, 31 May 2018

Sebastian Wilzbach