Sanchit Alekh
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Education

- **RWTH Aachen University** — Aachen, Germany
  MSc. Software Systems Engineering (Pursuing) — *2016 - 2018*
- **Indian Institute of Information Technology** — Allahabad, India
  B.Tech (Honours) - Information Technology, GPA : 9.08/10.0 — *2012 - 2016*
  - Received a *Merit Incentive Scholarship* from Government of India
  - Pursued Bachelor Thesis on the topic *Author Disambiguation for Medical Patents* at RWTH Aachen University, Germany
- **Delhi Public School** — Patna, India
  Higher Secondary Schooling, Score: 93.6 % — *2010 - 2012*

Skills

- **Development:** Java (Preferred), Python, C, MATLAB, LaTeX
- **Numerical Analysis and Computer Science:** Machine Learning, Data Mining, Text Mining, Optimization Techniques, Linear Algebra, Probabilistic Bayesian Algorithms, Computer Vision, Privacy Threat Modeling of Software Systems, Ontology Engineering, Linked Data
- **Technology:** Numerical Libraries, Web Frameworks, Databases, Linux, Git, Vim, DICOM, Health Level 7(HL7), SNOMED CT, EUROPE PMC
- Diverse background in Software Engineering, Math, Computer Science, Physics and Economics allows me to think on a problem analytically across a wide technical scope and start contributing in a group immediately

Research and Work Experience

- **Informatik 5, RWTH Aachen University** — Aachen, Germany
  Student Assistant — *Jan 2016 - current*
  - **Work Summary:** Working under PD Dr. Christoph Quix as a part of the mi-Mappa project (`dbis.rwth-aachen.de/cms/projects/mi-mappa`), which aims to identify suitable actors for complex innovation in medical science. My Bachelor Thesis was also a part of this project, and it is titled *Author Disambiguation for Medical Patents*.
  - **Areas Spanned:** Medical Text Analysis, Information Extraction, Text Mining, High-Performance Computing
- **Knowledge Mining and Assessment Group, TU Darmstadt** — Darmstadt, Germany
  Student Assistant — *May 2015 - Jul 2015*

- **Work Summary:** Under Prof. Dr. Ulf Brefeld, worked on computing a confidence measure on reliability of data on crowd-sourced encyclopedia like `www.wikipedia.com` and commercial encyclopedia like `www.britannica.com`.
- **Areas Spanned:** Python, MySQL, Information Extraction, Text Mining, Conditional Random Fields, Wikipedia API

- **Centre for Development of Advanced Computing** Pune, India
  Project Trainee *Dec 2014 - Jan 2015*
  - **Work Summary:** Built an anonymizer service for Medical Imaging standards DICOM and HL7 to conform to HIPAA standards using C-DAC's Medical Standards Toolkit.
  - **Areas Spanned:** Java, DICOM, HL7, DIMSE Services, HIPAA

- **University of Wisconsin** Milwaukee, USA
  Research Intern *May 2014 - Jul 2014*
  - **Work Summary:** Under Prof. Hemant K. Jain, analyzed and optimized current algorithms for anonymizing personal information in Medical Health Data. Focused on Mu-Argus for structured and MIST for unstructured data. Work available on `deidproject.tumblr.com`
  - **Areas Spanned:** Java, HIPAA, Text Mining

Publications

1. **Combining Keystroke Dynamics and Face Recognition for User Verification**
   8th IEEE International Conference on Computational Science and Engineering, October 2015, Porto, Portugal. Paper can be accessed here: `http://goo.gl/hVHTCi`

2. **Ontology-based classification and Analysis of Smart-City Events**
   International Conference on Computational Techniques in Information and Communication Technologies, March 2016, New Delhi, India. Paper can be accessed here: `https://goo.gl/L05apc`

Other Projects

- **Neural Network Architecture for Incremental Learning** Compared various Incremental Learning architectures, namely ARTMAP and Learn++. Also tested them against MLP-Backpropagation and weighed the advantages and disadvantages of the incremental learning algorithms

Standardized Test Scores

1. **Graduate Record Exam (GRE)** Quantitative: 170/170, Verbal: 159/170, AWA: 5/6

2. **TOEFL** 118/120