Curriculum Vitae - Elias Eulig

Personal Data	Date of birth	30.09.1995
	Place of birth	Hanover, Germany
	Citizenship	German
Work	2018 - today	Student researcher in the X-Ray Imaging and Computed Tomography group at the German Cancer Research Center (DKFZ) in Heidelberg under supervision of Prof. Dr. Marc Kachelrieß with main focus on development of deep learning methods for CT and X-ray image data.
	2017 - today	Student researcher in the Department of Connectomics at the Max Planck Institute for Brain Research in Frankfurt a.M. under supervision of Prof. Dr. Moritz Helmstaedter.
	2013 - 2014	"Freiwilliges Wissenschaftliches Jahr" (Voluntary scientific year) at the "Laser-Zentrum-Hanover". This is an one year internship in a scientific organization for high school graduates organized by the "Medizinische Hochschule Hannover". Here I had my first experiences doing research for the *MOMA (Mars Organic Molecule Analyser)* project under direction of Dr. Christian Kolleck and Dr. rer. nat. Jörg Neumann. In particular, I helped constructing laser systems, did various stress tests on prototypes for the MOMA laser, made engineering drawings using different CAD programs, and designed automated measurement systems as well as their software.
Education	2017 - today	Master of Physics at Heidelberg University.
	2017	Bachelor thesis written in the Department of Connectomics at the Max Planck Institute for Brain Research in Frankfurt a.M. under the supervision of Prof. Dr. Juergen Hesser and Prof. Dr. Moritz Helmstaedter.
	2014 - 2017	Bachelor of Physics at Heidelberg University.
	2013	Abitur (High School Degree)
	2005 - 2013	Wilhelm-Raabe-Schule, Hanover
	2001 - 2005	Kardinal-Bertram-Schule, Hanover
Languages	German	mother tongue
	English	fluent
	French	basic knowledge (A2)

Computer Skills   Proficient with *Matlab*, *Python* and the deep learning libraries *PyTorch* and *Tensorflow*. Furthermore I am familiar with *Mathematica*, *R*, *LabVIEW* and *Origin* as well as with the CAD softwares *SolidWorks*, *AutoCAD* and *CATiA*.

Extracurricular Activities	Active member of the German Social Democratic Party ("Sozialdemokratische Partei Deutschlands [SPD])" and this party's student group.
	Award by the "Deutsche Physikalische Gesellschaft" (DPG) for the best Abitur in physics, Member of the DPG.
	Delegate at the International Academic Summer Forum in Augsburg 2018 (AUX '18) by the European Youth Parliament Germany.
Publications	**Elias Eulig**, Joscha Maier, Michael Knaup, Thomas König, Klaus Hörndler, and Marc Kachelrieß. Deep DSA: Learning digital subtraction angiography for static and dynamic acquisition protocols using a deep convolutional neural network. *Program of the European Congress of Radiology*, February 2019.
	Joscha Maier, **Elias Eulig**, Sabrina Dorn, Stefan Sawall, and Marc Kachelrieß. Real-Time Patient-Specific CT Dose Estimation for Single- and Dual-Source CT using a Deep Convolutional Neural Network. *Program of the European Congress of Radiology*, February 2019.
	Elias Eulig, Joscha Maier, Andreas Hahn, and Marc Kachelrieß. Deep Inpainting for Photon-Counting Cone-Beam CT. *Program of the 105th Scientific Assembly and Annual Meeting of the RSNA*, November 2018.
	Joscha Maier, **Elias Eulig**, Stefan Sawall, and Marc Kachelrieß. Deep Scatter Estimation (DSE) for Truncated Cone-Beam CT (CBCT). *Program of the 105th Scientific Assembly and Annual Meeting of the RSNA*, November 2018.
	Joscha Maier, **Elias Eulig**, Sandra Dorn, Stefan Sawall, and Marc Kachelrieß. Real-Time Patient-Specific CT Dose Estimation using a Deep Convolutional Neural Network. *IEEE 2018 NSS/MIC/RTSD*, 2018a.
	Joscha Maier, **Elias Eulig**, Tim Voth, Michael Knaup, Jan Kuntz, Stefan Sawall, and Marc Kachelries. Real-time scatter estimation for medical ct using the deep scatter estimation : Method and robustness analysis with respect to different anatomies, dose levels, tube voltages, and data truncation. *Medical Physics*, 46(1):238–249, November 2018b. doi: 10.1002/mp.13274.