**UNIVERSITAS GADJAH MADA**
Faculty of Mathematics and Natural Sciences
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# STAFF HANDBOOK

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|---|---|---|---|
| Name | *Zenith Purisha* | | |
| Post | *Computational Mathematics* | | |
| Academic career | *Initial academic appointment* | *Institution* | *Year* |
| | Doctorate (Math) | *University of Helsinki* | *2018* |
| | *Master's degree (Math)* | *UGM* | *2011* |
| | *Undergraduate degree (Math)* | *UGM* | *2008* |
| Employment | *Lecturer* | *UGM* | *2012 - now* |
| Research and development projects over the last 5 years | *A novel numerical method for CT image reconstruction*<br>*April – September 2022*<br>*Amount: Rp. 15.000.000*<br>*A new numerical method for CT reconstruction from under-sampled data*<br>*April – September 2023*<br>*Amount: Rp. 15.000.000* | | |
| Industry collaborations over the last 5 years | *Project title: -*<br>*Partners: -* | | |
| Patents and proprietary rights | *Title* | | *Year* |
| Important publications over the last 5 years | *Selected recent publications from a total of approx. 12*<br>1. Emzir, M., Lasanen, S., Purisha, Z., Roininen, L. and Särkkä, S., 2020. Non-stationary multi-layered Gaussian priors for Bayesian inversion. *Inverse Problems*, *37*(1), p.015002.<br>2. Brücken, Erik, et al. "Multispectral photon-counting for medical imaging and beam characterization." *Journal of Instrumentation* 15.02 (2020): C02024.<br>3. Purisha, Z., Jidling, C., Wahlström, N., Schön, T.B. and Särkkä, S., 2019. Probabilistic approach to limited-data computed tomography reconstruction. *Inverse Problems*, *35*(10), p.105004. | | |

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| | 4. Hakkarainen, J., Purisha, Z., Solonen, A. and Siltanen, S., 2019. Undersampled dynamic X-ray tomography with dimension reduction Kalman filter. *IEEE Transactions on Computational Imaging*, *5*(3), pp.492-501.<br>5. Purisha, Z., KARHULA, S., KETOLA, J., RIMPELÄINEN, J., NIEMINEN, M., SAARAKKALA, S. and SILTANEN, S., 2019. Accelerated-scan X-ray microtomography for assessing bone mineral content. *IEEE Transactions on Medical Imaging*. |
| Activities in specialist bodies over the last 5 years | *Organisation* *Role* *Period*<br><br>- |