

Institute of Exact Sciences Department of Computer Science

The emergence of an Information Bottleneck Theory of Deep Learning

Frederico Guth

Dissertation presented for conclusion of the Master Degree in Computer Science

Prof. Teófilo Emidio de Campos (Supervisor) Universidade de Brasília

Prof. Shawe-Taylor University College London Prof. Moacir Ponti Universidade de São Paulo

Prof. Genaína Nunes Rodrigues Computer Science Graduate Program Coordinator

Brasília, 2 de junho de 2021