

COMP2221 Systems Programming Summative Coursework Report

[Student ID]



1 SUMMARY OF APPROACH & SOLUTION DESIGN

(Make sure to include references where appropriate)

2 ANALYSIS OF SOLUTION

....

3 USE OF GENERATIVE AI, TOOLS, OR OTHER RESOURCES

....

4 ADDITIONAL FUNCTIONALITY

....

REFERENCES

- [1] J.S. Bridle, *Probabilistic Interpretation of Feedforward Classification Network Outputs, with Relationships to Statistical Pattern Recognition*, Neurocomputing—Algorithms, Architectures and Applications, F. Fogelman-Soulie and J. Herault, eds., NATO ASI Series F68, Berlin: Springer-Verlag, pp. 227-236, 1989. (Book style with paper title and editor)
- [2] W.-K. Chen, *Linear Networks and Systems*, Belmont, Calif.: Wadsworth, pp. 123-135, 1993. (Book style)
- [3] H. Poor, *A Hypertext History of Multiuser Dimensions, MUD History*, <http://www.ccs.neu.edu/home/pb/mud-history.html>. 1986. (URL link *include year)
- [4] K. Elissa, *An Overview of Decision Theory*, unpublished. (Unpublished manuscript)

FORMATTING INSTRUCTIONS FOR WORD (DELETE)

TABLE 1
UNITS FOR MAGNETIC PROPERTIES

Symbol	Quantity	Conversion from Gaussian and CGS EMU to SI ^a
Φ	magnetic flux	$1 \text{ Mx} \rightarrow 10^{-8} \text{ Wb} = 10^{-8} \text{ V}\cdot\text{s}$
B	magnetic flux density, magnetic induction	$1 \text{ G} \rightarrow 10^{-4} \text{ T} = 10^{-4} \text{ Wb/m}^2$
H	magnetic field strength	$1 \text{ Oe} \rightarrow 10^3/(4\pi) \text{ A/m}$
m	magnetic moment	$1 \text{ erg/G} = 1 \text{ emu}$ $\rightarrow 10^{-3} \text{ A}\cdot\text{m}^2 = 10^{-3} \text{ J/T}$
M	magnetization	$1 \text{ erg/(G}\cdot\text{cm}^3) = 1 \text{ emu/cm}^3$ $\rightarrow 10^3 \text{ A/m}$
$4\pi M$	magnetization	$1 \text{ G} \rightarrow 10^3/(4\pi) \text{ A/m}$
σ	specific magnetization	$1 \text{ erg/(G}\cdot\text{g}) = 1 \text{ emu/g} \rightarrow 1 \text{ A}\cdot\text{m}^2/\text{kg}$
j	magnetic dipole moment	$1 \text{ erg/G} = 1 \text{ emu}$ $\rightarrow 4\pi \times 10^{-10} \text{ Wb}\cdot\text{m}$
J	magnetic polarization	$1 \text{ erg/(G}\cdot\text{cm}^3) = 1 \text{ emu/cm}^3$ $\rightarrow 4\pi \times 10^{-4} \text{ T}$
χ, κ	susceptibility	$1 \rightarrow 4\pi$
χ_p	mass susceptibility	$1 \text{ cm}^3/\text{g} \rightarrow 4\pi \times 10^{-3} \text{ m}^3/\text{kg}$
μ	permeability	$1 \rightarrow 4\pi \times 10^{-7} \text{ H/m}$ $= 4\pi \times 10^{-7} \text{ Wb/(A}\cdot\text{m)}$
μ_r	relative permeability	$\mu \rightarrow \mu_r$
w, W	energy density	$1 \text{ erg/cm}^3 \rightarrow 10^{-1} \text{ J/m}^3$
N, D	demagnetizing factor	$1 \rightarrow 1/(4\pi)$

Statements that serve as captions for the entire table do not need footnote letters. E.g. M_x = maxwell, G = gauss, Oe = oersted; Wb = weber, V = volt, s = second, T = tesla, m = meter, A = ampere, J = joule, kg = kilogram, H = henry.

References

The list of cited references should appear at the end of the report, listed by order of appearance in the paper. The required style is to note citations in individual brackets, followed by a comma, e.g. “[1], [5]” (as opposed to the more common “[1, 5]” form.) Citation ranges should be formatted as follows: [1], [2], [3], [4] (as opposed to [1]-[4]). When citing a section in a book, please give the relevant page numbers [2]. In sentences, refer simply to the reference number, as in [3]. Do not use “Ref. [3]” or “reference [3]” At the beginning of a sentence use the author names instead of “Reference [3],” e.g., “Smith and Smith [3] show ...”.

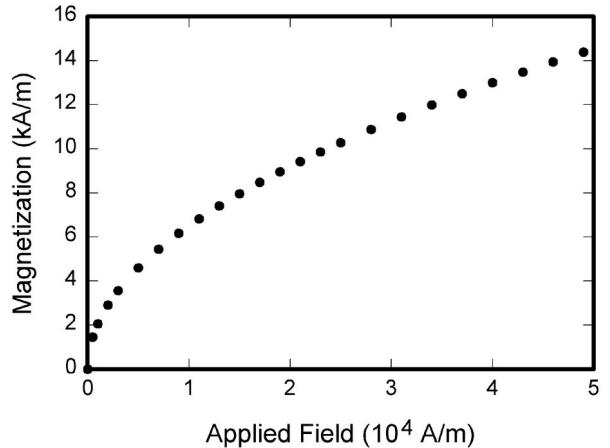


Fig 1. Magnetization as a function of applied field. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption