

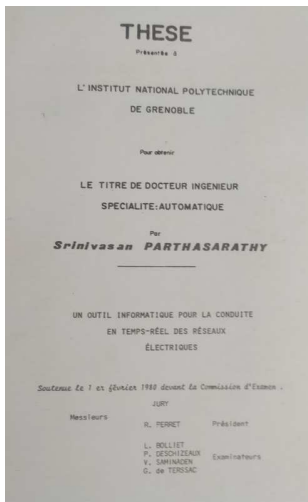
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# Dr. Ing. Thesis of S. Parthasarathy

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Ref.: partha-thesis.tex<sup>1</sup>



The *Docteur Ingénieur* (i.e. Engineering Doctorate) thesis titled: *Un outil informatique pour la conduite en temps réel des réseaux électriques* (in French), was presented and defended on 1 Feb. 1980, at the Institut National Polytechnique de Grenoble, Grenoble, France (INPG).

Thesis was rated *Très Honorable et les félicitations du jury*. This rating may be roughly translated as the Latin Honour : Magna cum laude.

1. Entire thesis was written and defended publicly in French . The jury consisted of representatives from Electricité de France (EDF) and reputed academicians from INPG and other French research institutions.
2. Based on an actual problem defined at a CIGRE Conference<sup>2</sup>
3. Was published just a few months after an unprecedented, dramatic and nation-wide power outage in France (19 Dec. 1978). The thesis was found to be timely and of great practical relevance.
4. Based on an innovative graph-theory based mathematical model and also a Petri-net based methodology of design.<sup>3</sup> This graph-theory based model is applicable to a large variety of sequential-control problems.

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<sup>1</sup>All texts shown in **winered** color are clickable hyperlinks.

<sup>2</sup>Rapport Spécial du Groupe 32 exploitation, commande et réglage de Réseaux, CIGRE (Conférence International de Grandes Réseaux Electriques), 1978 .

<sup>3</sup><https://drpartha.org.in/publications/transition-rules-partha.pdf>

5. Method and mathematical model developed with the active support of the Research Centre (Clamart) of Electricité de France (EDF). Developed, tested and demonstrated at the Laboratoire d'Automatique de Grenoble of INPG, under the supervision of Dr. P. Deschizeaux.
6. Presented and vetted in international conferences conducted by the International Federation of Automatic Control (IFAC). Also published in peer-reviewed international journals.
7. Entirely funded by a scholarship offered by the Government of France.
8. **The lesson I learnt from this mission:** Don't look before you leap

\* \* \* 20220615