

## **ABSTRACT**

**Rahmat Haryadi Kiswanto**, *A Cost Optimization Method Based on the Specific Needs to Combine the Personal Computer Hardware Parts* (supervised by **Suarga** and **Rhiza S. Sadjad**).

The main goal of this project is to develop a cost optimization method to find the best combination of a personal computer hardware parts. The optimization is constrained by the user's specific needs and the budget limit. The "backtracking" searching method is implemented. The budget limits of Rp. 3.000.000,-, Rp. 3.500.000,- and Rp. 4.000.000,- have been successfully tested, with performance indexes of 3324, 4169 and 5242 respectively.