Fake Title:   
Using PCGTSP Algorithm for Solving Segment Cutting Problems

First A. Author\*. Second B. Author, Jr.\*\* Third C. Author\*\*\*

\*National Institute of Standards and Technology, Boulder, CO 8030  
USA (Tel: 303-555-5555; e-mail: [author@boulder.nist.gov](mailto:author@boulder.nist.gov)).

\*\*Colorado State University, Fort Collins, CO 80523 USA (e-mail:  
[author@lamar.colostate.edu](mailto:author@lamar.colostate.edu))

\*\*\* Electrical Engineering Department, Seoul National University  
Seoul, Korea, (e-mail: [author@snu.ac.kr)](mailto:author@snu.ac.kr))}

**Abstract**: These instructions give you guidelines for preparing papers for IFAC conferences. Use this document as a template to compose your paper if you are using Microsoft Word 2016 or later. Otherwise, use this document as an instruction set. Please use this document as a “template” to prepare your manuscript. For submission guidelines, follow instructions on paper submission system as well as the Conference website.

*Keywords*: Include a list of 5-10 keywords.

1. INTRODUCTION

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

# 2. SECTION

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

# 3. NUMERICAL EXPERIMENTS

Use the native Word equation tools by selecting Insert > Equation on the Menu bar.

# 6. CONCLUSIONS

A conclusion section is not required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

# REFERENCES

Chentsov, A.G., Chentsov, P.A., Petunin, A.A., and Sesekin, A.N. (2018). Model of megalopolises in the tool path optimisation for CNC plate cutting machines. *International Journal of Production Research*, 56(14), 4819–4830. doi:10.1080/00207543.2017.1421784.

Khachay, M., Kudriavtsev, A., and Petunin, A. (2020). PCGLNS: A heuristic solver for the Precedence Constrained Generalized Traveling Salesman Problem. In N. Olenev, Y. Evtushenko, M. Khachay, and V. Malkova (eds.), *Optimization and Applications*, volume 12422 of *Lecture Notes in Computer Science*, 196–208. Springer International Publishing, Cham. doi:10.1007/978-3-030-62867-3 15.

Khachay, M., Ukolov, S., and Petunin, A. (2021). Problem-Specific Branch-and-Bound Algorithms for the Precedence Constrained Generalized Traveling Salesman Problem. In N. Olenev et al. (eds.), *Optimization and Applications*, volume 13078 of *Lecture Notes in Computer Science*, 136–148. Springer Nature Switzerland AG, Cham, Switzerland. doi:10.1007/978-3-030-91059-4 10.

Petunin, A.A., Polishchuk, E.G., and Ukolov, S.S. (2019). On the new Algorithm for Solving Continuous Cutting Problem. *IFAC-PapersOnLine*, 52(13), 2320–2325. doi: 10.1016/j.ifacol.2019.11.552.

Salman, R., Ekstedt, F., and Damaschke, P. (2020). Branch-and-bound for the Precedence Constrained Generalized Traveling Salesman Problem. *Operations Research Letters*, 48(2), 163–166. doi:10.1016/j.orl.2020.01.009.