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上海冠东国际集装箱码头有限公司
SHANGHAI GUANDONG INTERNATIONAL CONTAINER TERMINAL CO., LTD.

证明信

俞宙

上海冠东国际集装箱码头有限公司，副总经理

浦东新区芦潮港镇同汇路 1 号，中国，上海，201308

尊敬的 *Interfaces* 主编，Srinivas Bollapragada 博士：

我特此证明丁一博士和他的团队所开发的昼夜泊位策划决策支持系统（BAPOPT）已经成功在冠东码头上线并且得到实际应用。论文"SGICT Builds an Optimization-Based System for Daily Berth Planning"中展示的数据结果已经获得了公司领导的认可。

泊位策划是一项非常复杂的业务。由于船舶信息的不断更新，码头复杂的水文和地理条件，以及各种码头作业要求，使得计划员在制定泊位计划时倍感压力。过去，人工制定泊位计划需要耗费数小时才能完成。现在通过利用运筹学的方法，我们的系统能够在数分钟之内自动生成更加合理和可靠的泊位计划。BAPOPT 极大的提高了我们泊位策划业务流程的效率。它使计划员能够分析各种因素对船舶作业的影响，从而帮助计划员更深入的理解泊位策划的业务。同时，它也可以作为一种仿真工具用来模拟不同场景下码头的作业情况。例如，可以使用它来模拟一天之内多靠或者少靠一艘船对堆场作业量分布的影响。

我们下一步的计划是开发更加强大的决策工具来支持桥吊作业计划和船舶配载。这两项业务涉及更加细致和复杂的业务逻辑，会使得开发更具挑战性和更耗费时间。但是，在 BAPOPT 成功上线的基础上，我们对开发充满信心。

顺祝安康！

签名：

日期：2015.11.2

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November 2, 2015

Dr. Srinivas Bollapragada
Editor-in-Chief
Interfaces

Verification Letter

Dear Dr. Bollapragada:

I hereby confirm that the decision support system, BAPOPT, developed by Dr. Yi Ding and his team, has been successfully deployed and used at SGICT. The results presented in the manuscript "SGICT Builds an Optimization-Based System for Daily Berth Planning" have been approved by our company's senior management.

Berth planning has never been an easy task at SGICT. The frequently updated vessel information, complicated hydrological and geographical conditions, and various operational requirements have made the berth planning process quite difficult to carry out. In the past, the planning process was done manually and required several hours. With the support of operations research methodology, our new system is able to generate more reasonable and reliable berth plans automatically within several minutes. As a result, the efficiency of the berth planning process has increased substantially. The system also enables our planners to analyze the impacts of various factors on the vessel service, which helps them gain deeper insights into the berth planning business. It also serves as a simulation tool that helps our planners understand the terminal operation under different scenarios. For example, it can inform us how the daily workload distribution of the container yard will be affected if one more vessel or one fewer vessel is admitted to the terminal.

Our next step is to develop more sophisticated decision support tools to support the quay crane scheduling and vessel stowage processes, which involve even more detailed and complicated operational considerations. This will definitely be a more challenging and time-consuming project. However, with the success of BAPOPT, we are confident about the development of these new planning tools.

Sincerely,

Zhou Yu
Vice General Manager
Shanghai Guandong International Container Terminal Co., Ltd. (SGICT)