

# Basic methodology in *cHawk*

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## Contents

<b>1</b>	<b>Expectation-Maximization algorithm</b>	<b>2</b>
1.1	Expectation . . . . .	2
1.2	Maximization . . . . .	2
<b>2</b>	<b>Loss function</b>	<b>2</b>
2.1	Log-likelihood . . . . .	2
2.2	Regularization . . . . .	2
2.2.1	L1 regularization . . . . .	2
2.2.2	L2 regularization . . . . .	2
<b>3</b>	<b>Derivatives of loss function</b>	<b>2</b>
3.1	log-likelihood . . . . .	2
3.2	L1 regularization . . . . .	2
3.3	L2 regularization . . . . .	2

# **1 Expectation-Maximization algorithm**

some text

## **1.1 Expectation**

some text

## **1.2 Maximization**

some text

# **2 Loss function**

some text

## **2.1 Log-likelihood**

some text

## **2.2 Regularization**

some text

### **2.2.1 L1 regularization**

### **2.2.2 L2 regularization**

# **3 Derivatives of loss function**

some text

## **3.1 log-likelihood**

some text

## **3.2 L1 regularization**

some text

## **3.3 L2 regularization**

some text