

Recruitment Classification of Security Unit PT. Satria Kencana Abadi Using Naïve Bayes Method

Elkin Rilvani^{1*}, Nurhadi Surojudin², Muhtajuddin Danny³, Evan Yoga Pratama⁴

^{1,2,3,4}Informatics Engineering Study Program, Faculty of Engineering, Pelita Bangsa University, Indonesia

¹elkin.rilvani@pelitabangsa.ac.id, ²nurhadi@pelitabangsa.ac.id, ³utat@pelitabangsa.ac.id, ⁴evanyoga@gmail.com



*Corresponding Author

Article History:

Submitted: 22-06-2024

Accepted: 22-06-2024

Published: 05-07-2024

Keywords:

Naïve Bayes; Recruitment;
Security Unit.

Brilliance: Research of Artificial Intelligence is licensed under a Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0).

ABSTRACT

To obtain human resources that meet company standards, the problems faced are the difficulty of the selection process in a short time and the complexity of the decision making process, resulting in subjective decision making. Recruitment of security unit personnel is an important process for PT. Satria Kencana Abadi in ensuring the quality and effectiveness of the security services provided. The recruitment process involves evaluating various criteria such as work experience, age, physical health, skills, and so on. To increase efficiency and accuracy in this selection process, the research uses the Naïve Bayes method for classification of security force recruits. This research is to assist the assessment process in making decisions to determine the selection of security units so that they are more targeted so that they can help the company. The data used was 697 data with 558 training data and 139 test data. Testing of this data was carried out using the Naïve Bayes algorithm method to classify so that accurate and efficient decision making can be determined, using the Rapidminer tool which has an accuracy of 82.01%, precision of 81.61%, and recall of 88.75%. The results of the research show that the Naïve Bayes method has a high level of accuracy in classifying prospective security force personnel. The resulting model is able to provide appropriate and reliable recommendations in the recruitment process, so it is hoped that it can help PT. Satria Kencana Abadi in increasing the efficiency and effectiveness of the security force recruitment process.

INTRODUCTION

As time goes by, human resources have become an important aspect for a company. The human resources aspect has a big role in the success of a company in running its business (Haya Pangestu, 2023). The Security Unit is a group of officers formed by an agency/project/business entity to carry out physical security in the context of implementing independent security in their work environment. All forms of business, whether large or small scale, definitely need protection. Therefore, companies must have quality and potential human resources in order to be able to compete with today's masses. To obtain quality and potential human resources, recruitment and selection must be carried out correctly in order to obtain the desired things. Security Guard (Security Unit) is a unit or group of officers formed by agencies/business entities to carry out security measures in order to provide security in their work environment. The main task of a security guard is to maintain security and order in the workplace environment which includes aspects of physical security, personnel, information and other technical security (Yosepa et al., 2020). When carrying out recruitment and selection, you must look at various things such as the educational background or skills possessed by prospective applicants. This is in accordance with the principle of "The Right Man on the Right Place" or the right person for the right position (Siagian & Tarihoran, 2023). Companies that need security services often require a security unit (security guard) that is professional and meets the desired standards. The security guard recruitment process involves assessing various criteria and attributes of candidates that include educational background, work experience, special skills, physical health, communication abilities, and others. However, this process can be very complex and time consuming, especially if done manually. Recruitment is a series of activities to search for and attract applicants with the motivation, abilities, skills and knowledge required in personnel planning (S et al., 2017)

PT. Satria Kencana Abadi's recruitment for security units is still done manually by the HR team. They assess based on CVs, conduct initial interviews, and conduct physical and psychological tests. Some of the main criteria assessed include educational background (minimum high school), work experience in the security sector, self-defense skills, physical health (proven by a health certificate), and the results of psychological tests. Because security unit recruitment is still done manually, it makes the screening process difficult and inefficient. The company faces challenges in selecting the right candidates for various security positions.

Based on this, research is needed to improve the efficiency and accuracy of the security unit selection process through the use of machine learning methods, especially Naïve Bayes at PT. Satria Kencana Abadi.

This research aims to improve the efficiency, accuracy and objectivity of the security unit recruitment process using the Naïve Bayes method. By automating initial screening and providing data-based recommendations, it is hoped that companies can be more effective in selecting the right candidates, reduce costs, and improve overall security force performance.

LITERATURE REVIEW

Quality of Life of Congestive Heart Failure Sufferers Based on Degree of Physical Ability and Duration of Disease (Saida et al., 2020) is a study aimed at determining factors related to the quality of life of congestive heart failure sufferers based on degree of physical ability and duration of disease. Edward Robinson Siagian's research, Doansi Tarihoran (Yendra et al., 2020), is research that aims to find out what the employee recruitment procedures are at PT. Kreasibeton Nusapada. Human resources are a component that has a very important role in a company. In this research, an assessment method was created to make it easier for the HRD (Human Resource Department) to select competent workforce candidates to fill certain positions needed by the company. The assessment will be calculated by assessing all the criteria that must be met by prospective company employees, where the assessment is made according to standards that have been determined in advance by the management. The research produced a suitable candidate to fill the position as HSE (Health Safety Environment) staff at PT Kreasibeton Nusapersada, namely Rizki Vadlin with a final score of 1.75 which was calculated based on the Naïve Bayesian Classifier Algorithm. The results of this research show that the process of assessing the competency of prospective employees to fill available positions in the company has been proven to produce objective and effective assessments in accordance with the criteria determined by the company management (Yendra et al., 2020).

Application of the Naive Bayes Classifier method in determining recruitment selection new employees have proven to be effective for the process of selecting new employees.[5] Based on the data sample used, the company will choose the greatest probability of being accepted. From the results of research conducted, the Naive Bayes Classifier method is able to solve problems in selecting new employees. There are 50 applicant data used, of which 30 data are accepted and 20 data are not accepted, in selecting new employees at PT. Batavia Prosperindo Finance Tbk Bengkulu City, which will be selected and processed using the Naive Bayes Classifier method and produce probability values for potential new employees. The results of this theory are research from Royki Feisal, Dewi Suranti, & Jhoanne Fredricka (Andina & Arifa, 2021).

Results of Successful New Employee Recruitment Using the Naïve Bayes Method which is research from Yuyun Yuningsih and Eka Puspita Sari (Nur et al., 2024) emphasizes that it is often found in every company that many new employees have been recruited by the company, have been given training and can work accordingly. with company procedures, however, along the way, many people terminate the contract before the contract time finished, leaving or resigning without a clear and reasonable reason, with this it will be very detrimental to the company which has incurred costs when recruiting/accepting new employees and also the parts or units left behind will experience problems, because there are employee vacancies and will hampering the performance process in certain areas or sections. To overcome the problems that occur, when making decisions about accepting new employees in a company, it can be done using the Naïve Bayes method. The results of the Naïve Bayes method used in research that has been carried out on the acceptance/recruitment of new employees with prospective employee data used. is 80 data mining and 80 data testing with accuracy results obtained namely 95.00% (Nur et al., 2024). The results of the Naive Bayes method can later be used for the process of recruiting/selecting new employees based on the criteria required by the company, so that the company gets good employees who meet their needs. The final result of using the Naive Bayes method is that a system (application) will be created that can be used for the process of recruiting new employees (Nur et al., 2024).

Hidayatur Rakhmawati and Yuniarti Lestari (Siagian & Tarihoran, 2023) proved that when using Particle Swarm Optimization (PSO) it has greater accuracy. That way, this can be used as a model to be applied to other cases, with more complete datasets and attributes. Using a weighting method to overcome attribute independence in the NB algorithm. Research values show that the Naive Bayes (NB) and Particle Swarm Optimization (PSO) models have greater accuracy, namely 94.10%, compared to the Naive Bayes model of 91.45%. This research has proven that when using Particle Swarm Optimization (PSO) results have higher accuracy. This can be used as modeling to be applied to other cases, with more complete datasets and attributes .

Amir Mahmud Husein and Mahendra Brutu, in the research "Prediction of Recruitment of Prospective Employees Using the C4.5 Algorithm at the People's Welfare Bureau of North Sumatra Province" recommend large amounts of data, with the C4.5 Algorithm as a method that can analyze large amounts of data a lot. In this research, predicting the process of accepting new prospective employees by classifying prospective employee data based on specified criteria, by creating an application that implements a decision tree with the C4.5 algorithm. The data used in this research is prospective employee data. The flow of the research process starts from data collection, after the dataset is collected, the preprocessing stage is carried out for the data processing process. Then the calculation process is carried out manually or using the RapidMiner system to compare the results to accuracy. The dataset used is data on prospective new employees. There are 6 attributes used, namely C01 (File Selection), C02 (Color Blind Test), C03

(Knowledge Test According to Field), C04 (Efficiency), C05 (Cooperation), Recommendations as targets (Sigid Widodo et al., 2023). Testing was carried out using rapidminer software. Testing was carried out using 2 different operators, namely split validation and cross validation [9] by carrying out several experiments on data sampling in order to find the best level of accuracy. After testing is carried out several times, the operator determined is to use the operator split validation and use stratified sampling with training data 90% and testing 10% data with an accuracy level obtained of 81.82% and classification error amounting to 18.18%. From the test results at Rapidminer, nineteen rules were obtained to predict whether prospective new employees would be accepted or not. (Sigid Widodo et al., 2023)

Diana Pramestiningsih and Aang Alim Murtopo in their research "Application of the Bayes Method in Decision Support Systems for New Employee Selection" (.et al., 2016), explained that the selection process for hiring employees in companies or private agencies still experiences problems in the decision making process due to the large number of applicants and the specified criteria. to provide employee recruitment decisions that are in line with expectations. The aim of this research is to implement a Decision Support System (DSS) in the employee recruitment process (. et al., 2016). The method used in this SPK is the Bayes method. Where the naïve Bayes method was chosen because it can determine the ranking for each attribute, then choose the best alternative from a number of existing alternatives. So a decision support system for employee recruitment selection was created using the Bayes method. Furthermore, Diana Pramestiningsih and Aang Alim Murtopo (Sigid Widodo et al., 2023) used the Bayes method for decision making. Bayes' Theorem Method is a method for producing parameter estimates by combining information from samples and other previously available information.

From several of these studies, the method used is Naive Bayes. However, there are differences in methods in determining classification and algorithms. These include the Naïve Bayesian Classifier Algorithm, Particle Swarm Optimization, Bayes Theorem Method, C4.5 Algorithm. In this research, using calculations Naïve Bayes Use Rapid Miner. Using RapidMiner for Naïve Bayes calculations has several significant advantages, especially in the context of data analysis and machine learning. Among them, an Intuitive User Interface, RapidMiner has automation features that allow users to run Naïve Bayes processes efficiently . Also RapidMiner supports integration with various data sources such as databases, text files, Excel, and cloud data services. This makes it easier for users to import and process data before performing Naïve Bayes calculations. RapidMiner offers a variety of visualization tools that help users to better understand data distribution, classification results, and model performance. Good visualization can facilitate interpretation of results and decision making. This platform provides various data analysis components, from data preprocessing, modeling, model evaluation, to deployment. All of this can be accessed in one well-integrated platform. RapidMiner provides various model evaluation methods such as cross-validation (Saputra, 2020), split validation, and bootstrapping (WAHYUDDIN SAPUTRA & M. HASRUL H, 2022), which help in ensuring that the Naïve Bayes model built has good performance and can be generalized.

METHOD

Selecting the right security unit is an important aspect in maintaining security and order in the company environment. PT. Satria Kencana Abadi as a large company needs to have clear procedures and criteria in selecting security units to ensure operational security and asset protection. This research aims to describe in depth how this process is carried out at PT. Eternal Satria Kencana.

This research is descriptive qualitative research on the selection of security units with the aim of exploring and describing in depth the processes, criteria and factors that influence the selection of security units in an organization or place (Nong Wori et al., 2021). In this research, data was used that was obtained directly from research sources or also known as primary data (Meita Sekar Sari, 2019). This data was obtained from employees who work at PT. Satria Kencana Abadi, regarding security unit (SATPAM) data that registers with the company. This data will then be processed using the Naïve Bayes method to find data accuracy in classifying security units (SATPAM). The steps in the research stages that will be carried out in this research process:



Figure 1. Research Stages

Data collection

Data collection methods are methods or techniques that can be used by researchers to collect data. To obtain accurate data in this research report, this writing uses several types of data used in this research, namely as follows:

a. Qualitative Data

Data is presented in verbal word form, not in number form. Qualitative data included in this research is a general description of the research object, including: employee data, applicant data.

b. Quantitative Data

Data that can be measured or calculated directly, in the form of information or explanations expressed in numbers or in the form of numbers. In this case, the quantitative data required is data used as a test in the form of numbers including: age and basic salary/income in the form of numbers as a reference in determining parameters in the research.

Table 1. Security Unit Recruitment Data Attributes

No	Attribute	Indicator	Usage Details
1	Full name	Ok	ID
2	Age	Not Ok	Not used
3	Gender	Not Ok	Not used
4	Status	Not Ok	Not used
5	Height	Ok	Model Value
6	Weight	Ok	Model Value
7	Blood group	Not Ok	Not used
8	Education	Not Ok	Not used
9	Writing test	Ok	Model Value
10	Field Test	Ok	Model Value
11	Interviews	Ok	Model Value
12	Work experience	Ok	Model Value

Data processing

Data that has been obtained usually cannot be directly processed using data mining. Therefore, this stage is used to group the data that will be needed based on the formula used for each variable to carry out calculations in the next stage.

a. Data Selection

Data selection is the stage of selecting variables from the data to be analyzed, because not all the data contained in the raw data will be used. So you get several variables that will be used as attributes. The need for familiarity with the data is important in the data selection process. Not all research data already has attributes or variables before the mining process is carried out. Therefore, data selection or classifying research data is the process of introducing data so that the data has a variable or attribute that is needed in the data processing process. Classification is one of the most important steps in data mining. The purpose of classification is to anticipate classes resulting from unknown items (Pebdika et al., 2023).

b. Data Set Division

To obtain an informative dataset, the dataset is divided into training data and testing data. Data obtained from data sources totaling 697 records can be tested using the Naive Bayes method algorithm, where 80% of the 558 data is allocated for training data and the remaining 20% of 139 records for testing data. This data has been pre-processed or data cleaned, namely by removing unnecessary attributes as "Accepted" and "Rejected" labels.

c. Data Transformation

Transformed data is clean relevant data that is ready for testing after the original research data has undergone data selection and data cleaning processes, resulting in transformed data that will be used in this research (Arafa Rahman Aziz et al., 2021).

Table 2. Height Attribute Data Transformation

Range	Information
<165	Not enough
165-170	Enough
>170	Good

Table 3. Transformation of Body Weight Attribute Data

Range	Information
<60 dan >80	Not Ideal
60-80	Ideal

Table 4. Transformation of Written Test Attribute Data

Range	Information
<60	Not enough
60-75	Enough
>75	Good

From the results of the selection process, the 697 datasets that will be used produce 6 attributes. Using attributes that contain each predetermined value is what will determine the results or accuracy that will be produced. As for determining variable values for the attributes that will be used in this research process and variables as research results.

Table 5. Data Transformation Results

NO	FULL NAME	HEIGHT	WEIGHT	WRITING TEST	FIELD TEST	INTERVIEW	WORK EXPERIENCE	RESULTS
1	M Faishal	Enough	Not ideal	Enough	Enough	Enough	Yes	Rejected
2	Rio Ricardo	Good	Ideal	Enough	Enough	Good	Yes	Accepted
3	Diah Sipa Dewi	Not enough	Not ideal	Enough	Enough	Not enough	None	Rejected
4	Rama Gunawan S	Good	Ideal	Enough	Enough	Not enough	None	Rejected
5	Setioko Ramadhani	Enough	Ideal	Enough	Enough	Enough	Yes	Rejected
6	Taufik Annan	Good	Not ideal	Enough	Enough	Enough	Yes	Accepted
7	Marwanto	Good	Ideal	Enough	Enough	Enough	Yes	Accepted
8	M. Bakri	Good	Ideal	Good	Enough	Not enough	None	Rejected
9	M. Rizki Syafii	Good	Not ideal	Good	Good	Enough	None	Rejected
10	Alifudin	Enough	Ideal	Good	Good	Enough	Yes	Rejected
11	Yusuf Aminudin	Good	Not ideal	Good	Good	Enough	None	Accepted
12	Yudi Pramana	Enough	Not ideal	Good	Good	Enough	None	Rejected
13	Yudi Pramana	Good	Ideal	Good	Good	Enough	None	Rejected
14	Helmi Mario	Good	Ideal	Good	Good	Enough	None	Rejected
15	M. Faisal B	Good	Ideal	Good	Good	Enough	None	Accepted
16	Abdul Dahlan	Good	Ideal	Good	Good	Enough	Yes	Accepted
17	Iskandar Syah	Enough	Not ideal	Good	Good	Enough	None	Rejected
18	Jubair	Enough	Not ideal	Enough	Enough	Enough	Yes	Rejected
19	Rio Ricardo	Good	Ideal	Enough	Enough	Enough	Yes	Accepted
20	Deden Rukmana	Good	Ideal	Good	Good	Enough	None	Accepted
21	Okky Bagus Prakoso	Enough	Ideal	Enough	Good	Enough	Yes	Accepted
22	Noval Diamsyah	Enough	Ideal	Good	Good	Enough	None	Accepted
23	Robi Somantri	Enough	Not ideal	Enough	Good	Enough	None	Rejected
24	Arif Abdullah	Good	Ideal	Enough	Enough	Enough	Yes	Accepted
25	Yogianto Catur S	Good	Not ideal	Enough	Enough	Enough	Yes	Accepted
297	Yodi Okta Armansyah	Enough	Not ideal	Good	Enough	Good	Yes	Rejected

Application of the Method

In this research, the data used is data taken from PT. Satria Kencana Abadi will be processed using the Naïve Bayes method to produce the most accurate data and can be used as a reference in recruiting security forces (SATPAM). In this research, several research stages will be carried out.

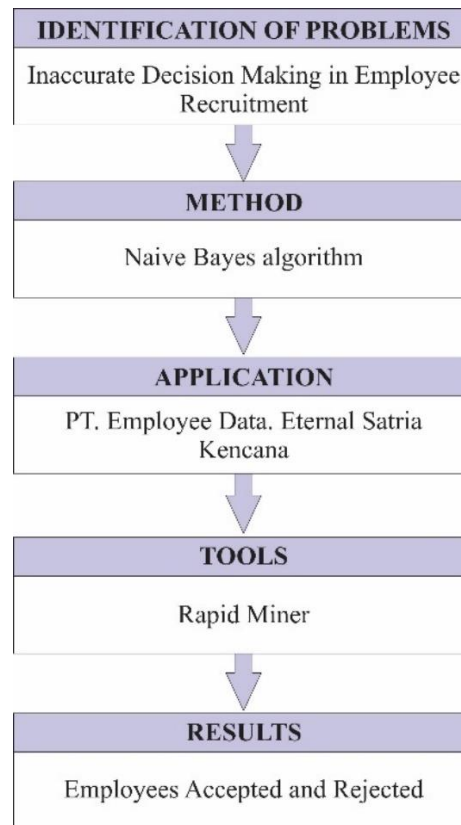


Figure 2. Framework of Thought

Evaluation and Results

At this stage, evaluation can be carried out by observing and analyzing the results of the algorithm used to ensure that the test results are correct or not in accordance with the discussion. Meanwhile, validation is carried out by measuring the prediction results to determine the level of accuracy, precision and recall.

1. Accuracy is the percentage of records that are correctly classified by the testing dataset
2. Precision is the percentage of data classified as a good model that is actually also good.
3. Recall is the result of measuring the level of positive recognition.

RESULT

Naïve Bayes Calculations Using Rapid Miner

After carrying out the naïve Bayes calculation process manually, the next step will be testing naïve Bayes using Rapid Miner. This test is carried out with the aim of finding accuracy, precision and recall of the data to be tested. The data that will be used is 558 training data and 139 testing data. Rapid Miner is a tool for predicting and analyzing data mining with the following steps:

- a. Import Training Data

This training data is used to practice forming a Classifier model to predict new data classes that have never existed.



Figure 3. Import Training Data

b. Import Testing Data

This testing data is used to measure the extent to which predictors have succeeded in correctly predicting product quality.

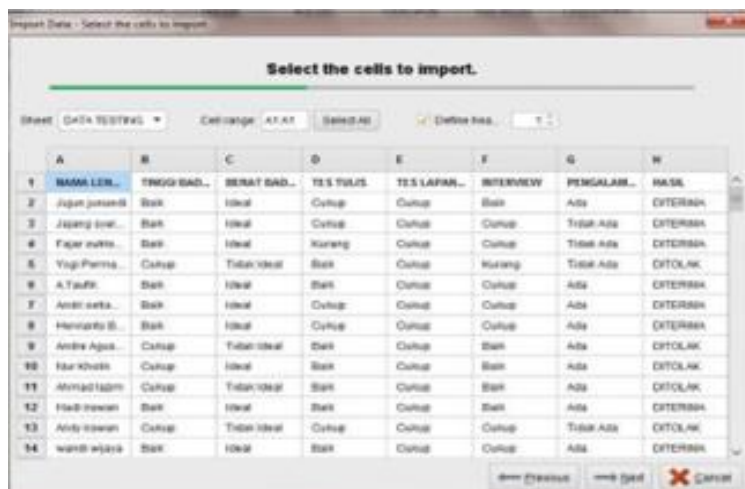


Figure 4. Import Testing Data

DISCUSSION

Testing Process

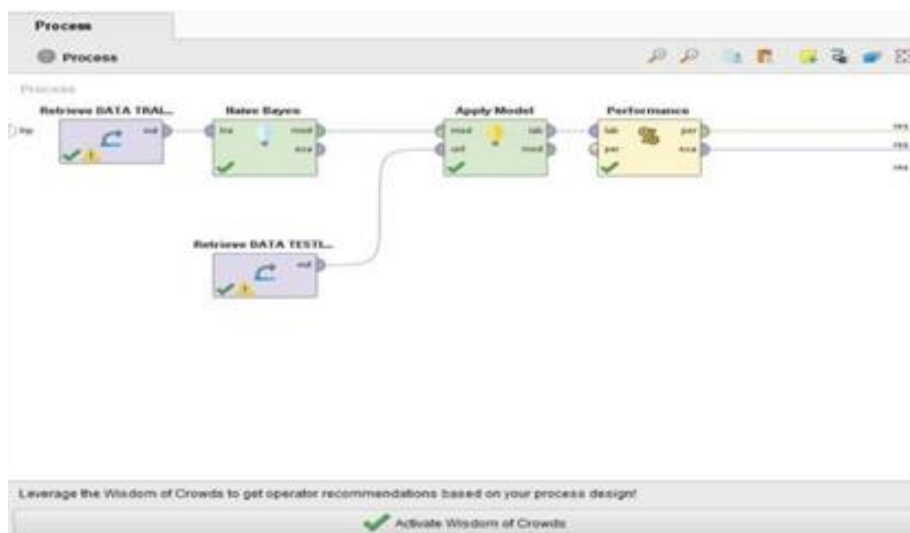


Figure 5. Naïve Bayes model in Rapid Miner

Accuracy, Precision, Recall

Below we will discuss how to get the value *accuracy*, *precision*, *Recall* on *Rapid Miner*.

Table View Plot View

accuracy: 82.01%

	true DITERIMA	true DITOLAK	class precision
pred. DITERIMA	71	16	81.61%
pred. DITOLAK	9	43	82.69%
class recall	88.75%	72.88%	

Figure 6. Results *Accuracy*

$$\begin{aligned}
 \text{Accuracy} &= \frac{TP + TN}{TP + FN + FP + FN} * 100\% \\
 &= \frac{71 + 43}{71 + 43 + 9 + 16} * 100\% \\
 &= \frac{114}{139} * 100\% \\
 &= 82.01\%
 \end{aligned}$$

The image below explains the calculation results *precision* of the algorithm *Naïve Bayes* that level *precision* reached 81.61%.

Table View Plot View

precision: 81.61% (positive class: DITERIMA)

	true DITOLAK	true DITERIMA	class precision
pred. DITOLAK	43	9	82.69%
pred. DITERIMA	16	71	81.61%
class recall	72.88%	88.75%	

Figure 7. Results *Precision*

$$\begin{aligned}
 \text{Precision} &= \frac{TP}{TP + FN} * 100\% \\
 &= \frac{71}{71 + 16} * 100\% \\
 &= \frac{71}{87} * 100\% \\
 &= 81.61\%
 \end{aligned}$$

The image below explains the calculation results *Recall* of the algorithm *naïve bayes that rate Recall* reached 88.75%

Table View Plot View

recall: 88.75% (positive class: DITERIMA)

	true DITOLAK	true DITERIMA	class precision
pred. DITOLAK	43	9	82.69%
pred. DITERIMA	16	71	81.61%
class recall	72.88%	88.75%	

Figure 8. Recall results

$$\begin{aligned}
 \text{Recal} &= \frac{TP}{TP + FN} * 100\% \\
 &= \frac{71}{71 + 9} * 100\% \\
 &= \frac{71}{80} * 100\% \\
 &= 88.75\%
 \end{aligned}$$

Area Under Curve

AUC(Area Under Curve) Optimistic The calculation results are visualized with a ROC curve(Receiver Operating Characteristics) or AUC(Area Under Curve). AUC results on rapid miner can be seen in the image below.



Figure 9. AUC curve

ROC has a diagnostic level, namely:

- Accuracy is 0.90 – 1.00 = *excellent classification*
- Accuracy is 0.80 – 0.90 = *fair classification*
- Accuracy is 0.70 – 0.80 = *poor classification*
- Accuracy is 0.50 – 0.60 = *failure*

Know the value of the ROC curve (Receiver Operating Characteristics) of AUC(Area Under Curve) The optimistic value in the picture above is 0.947, which is in the ROC range number 1, which means that the classification results of this research are at the diagnostic level. *excellent classification*.

CONCLUSION

After conducting research on the security unit recruitment process at PT. Satria Kencana Abadi, the conclusion can be drawn that with the naïve Bayes method using rapid miner tools the accuracy value obtained is 81.61%, thus the value obtained is accurate and helps the assessment process in making decisions for security unit recruitment. Based on the results of research and analysis that has been carried out on security unit recruitment using the Naïve Bayes method using rapid miner tools, there are several suggestions for increasing knowledge, namely using different methods as a comparison to get higher accuracy and the need to create a system as a tool in decision-making.

REFERENCES

- Andina, E., & Arifa, F. N. (2021). Problematika Seleksi dan Rekrutmen Guru Pemerintah di Indonesia. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 12(1), 85–105. <https://doi.org/10.46807/aspirasi.v12i1.2101>
- Arafa Rahman Aziz, Budi Warsito, & Alan Prahutama. (2021). Pengaruh Transformasi Data Pada Metode Learning Vector Quantization Terhadap Akurasi Klasifikasi Diagnosis Penyakit Jantung. *JURNAL GAUSSIAN*, 10(1), 1–30.
- Haya Pangestu, B. (2023). Data Mining Menggunakan Algoritma Naïve Bayes Classifier Untuk Evaluasi Kinerja Karyawan. *Jurnal Riset Matematika*, 177–184. <https://doi.org/10.29313/jrm.v3i2.2837>
- M., Asikin, Moh. F., Kurniawaty, D., Sari, S. K., & Cholissodin, I. (2016). Implementasi Metode Naïve Bayes Classifier Untuk Seleksi Asisten Praktikum Pada Simulasi Hadoop Multinode Cluster. *Jurnal Teknologi Informasi Dan Ilmu Komputer*, 3(4), 273. <https://doi.org/10.25126/jtiik.201634227>
- Meita Sekar Sari. (2019). Pengaruh Akuntabilitas, Pengetahuan, dan Pengalaman Pegawai Negeri Sipil Beserta Kelompok Masyarakat (Pokmas) Terhadap Kualitas Pengelola Dana Kelurahan Di Lingkungan Kecamatan Langkapura. *Muhammad Zefri*, 21(3), 308–316.
- Nong Wori, E., Abd. Rahman, N., & Nuwa, G. (2021). PERAN SATPAM DALAM PEMBENTUKAN KARAKTER DISIPLIN PESERTA DIDIK DI SMA NEGERI 2 MAUMERE KABUPATEN SIKKA. *Holistic Science*, 1(2), 66–70. <https://doi.org/10.56495/hs.v1i2.27>
- Nur, A. M., Nurhidayati, N., & Fathurrahman, I. (2024). Penerapan Metode Naïve Bayes Untuk Penentuan Penerima Beasiswa Program Indonesia Pintar (PIP). *Infotek: Jurnal Informatika Dan Teknologi*, 7(1), 93–102. <https://doi.org/10.29408/jit.v7i1.23995>
- Pebdika, A., Herdiana, R., & Solihudin, D. (2023). KLASIFIKASI MENGGUNAKAN METODE NAIVE BAYES UNTUK MENENTUKAN CALON PENERIMA PIP. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 7(1), 452–458. <https://doi.org/10.36040/jati.v7i1.6303>
- S, A., H Kara, , Muslimin, K, , Amiruddin, & Sabri AR, Moh. (2017). SISTEM REKRUTMEN KARYAWAN PADA PT. BANK SYARIAH MANDIRI CABANG BONE. *Jurnal Diskursus Islam*, 5(2), 384–400. <https://doi.org/10.24252/jdi.v5i2.7300>
- Saida, S., Haryati, H., & Rangki, L. (2020). Kualitas Hidup Penderita Gagal Jantung Kongestif Berdasarkan Derajat Kemampuan Fisik dan Durasi Penyakit. *Faletehan Health Journal*, 7(02), 70–76. <https://doi.org/10.33746/fhj.v7i02.134>
- Saputra, R. (2020). SISTEM INFORMASI PENERIMAAN PEGAWAI PADA PT. SIANYU PERKASA. *JIKA (Jurnal Informatika)*, 4(3), 44. <https://doi.org/10.31000/jika.v4i3.2889>
- Siagian, E. R., & Tarihoran, D. (2023). Implementasi Algoritma Naïve Bayes Classifier Dalam Penerimaan Karyawan. *BEES: Bulletin of Electrical and Electronics Engineering*, 3(1), 49–56. <https://doi.org/10.47065/bees.v3i1.3169>
- Sigid Widodo, A. Z. M., Pandu Kusuma, A., & Dwi Puspitasari, W. (2023). ANALISIS ALGORITMA NAIVE BAYES CLASSIFIER (NBC) PADA KLASIFIKASI TINGKAT MINAT BARANG DI TOKO VIOLET CELL. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 7(1), 87–94. <https://doi.org/10.36040/jati.v7i1.5692>
- WAHYUDDIN SAPUTRA, & M. HASRUL H. (2022). ANALISIS THROUGHPUT PADA HADOOP MENGGUNAKAN ALGORITMA DELAY SCHEDULING UNTUK PENGIRIMAN 2 JOB YANG BERBEDA. *Jurnal INSTEK (Informatika Sains Dan Teknologi)*, 7(2), 316–324. <https://doi.org/10.24252/instek.v7i2.32578>
- Yendra, R., Marifni, L., & Suryani, I. (2020). Klasifikasi Data Mining Untuk Seleksi Penerimaan Calon Pegawai Negeri Sipil Tahun 2017 Menggunakan Metode Naïve Bayes. *Jurnal Sains Matematika Dan Statistika*, 6(1), 65. <https://doi.org/10.24014/jsms.v6i1.9254>
- Yosepa, H., Samsudin, A., & Ramdan, A. M. (2020). Pengembangan Sumber Daya Manusia (SDM) terhadap Tingkat Etos Kerja Karyawan pada Hotel Santika Sukabumi. *Jurnal Ilmu Manajemen*, 8(3), 742. <https://doi.org/10.26740/jim.v8n3.p742-747>